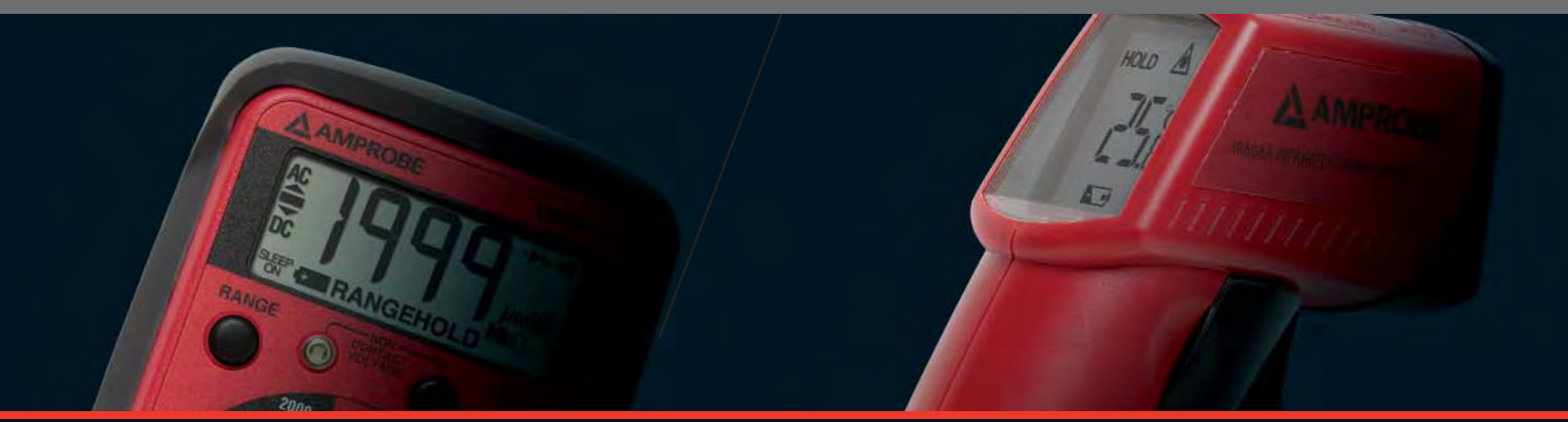
AMPROBE®

- Electrical testers
- Cable locators
- Multimeters
- Current clamps
- Installation testers
- Machinery tester
- Software
- Environment
- Power quality
- Accessories



Test Tools Catalog 2011/2012

www.amprobe.eu

Quality and service beyond compare

Our Customers

Throughout the past 50 plus years, the Amprobe® name has become synonymous with clamp-on meters, to the point where it is commonly used as a generic term for such. Yet the brand has expanded its product offering to now over 250 items and has become an established leader in quality test equipment for professionals in the electrical, maintenance, construction, and HVAC markets.

Our products

The products shown in this catalog include an extensive selection of portable multimeters, clamp meters, power quality analyzers, circuit tracers as well as component checkers, HVAC testers and specialty tools such as electrical testers. Also shown is a complete selection of accessories.

Our distributors

The products shown in this catalog are sold and supported by a worldwide network of Amprobe distributors and dealers. Should you require any assistance or have questions about our products or their applications, these local dealers stand ready to serve you.

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Voltage testers

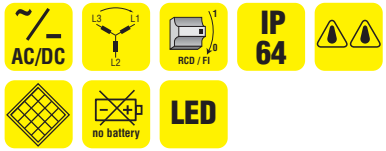
VP-700

Voltage Tester with phase rotation indication

Functions
- Voltage test
- Two-pole phase rotation indication, no “3rd hand” required
- Polarity display

Product Information
- Switchable load (load tester) of 140 W using two pushbuttons, tripping of 30 mA RCD
- IP 64, splash-proof and dust tight protection
- Probe tip protection for reducing the danger of injuries (attached to lead - permantly available)

Product Highlights
- No unawared tripping of RCD
- No batteries required (VP-700 only)
- Quick single-handed test on mains sockets at a contact distance of 19 mm, without detaching the test probe from the instrument

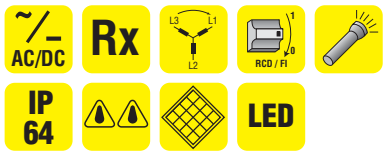


NEW

VP-710

Voltage and Continuity Tester with phase rotation indication

similar as VP-700 and also offers:
- Continuity test (optical)
- Single-pole test for phase polarity
- Torch function via white LED



NEW

VP-720

Voltage and Continuity Tester with phase rotation indication

similar as VP-710 and also offers:
- Digital LC display, 12…690 V AC/DC
- Vibration function

Technical Data

Display	LED bargraph display
	±12, ±24, 50, 120, 230, 400, 690 V
	VP-720 only:
	LC display, 12…690 V AC/DC
Voltage range	12...690 V AC/DC
DC/AC voltage	automatic detection
Frequency range	DC, 40…70 Hz
Internal load	approx. 2,4 W at 690 V
Test current	≤3,5 mA (do not press buttons)
Switchable load	approx. 140 W (at 690 V)
Test current with load	≤ 200 mA
Phase rotation indication	100...400 V AC (against earth)
Frequency range	40…70 Hz
Single-pole phase polarity (VP-710, VP-720 only)	
Voltage range	100…690 V AC/DC
Frequency range	40…70 Hz
Continuity test (VP-710, VP-720 only)	
Switching threshold	approx. 500 kΩ
Test current	<5 µA
Safety cert.	EN 61243-3, DIN VDE 0682-401
Measurement category	CAT IV / 600 V, CAT III / 690 V
Pollution degree	2
Protection degree	IP 64, splash-proof and dust tight protection
Power supply	from the test object (VP-700 only)
Power supply (VP-710, VP-720 only)	
Power supply	2 x batteries 1.5 V, IEC LR03
Power consumption	max. 30 mA / approx. 250 mW
Dimensions	approx. 280 x 78 x 35 mm
Weight	approx. 255 g (VP-700)
	approx. 310 g (VP-710, VP-720)

Scope of supply VP-700 Series:

1 VP-700 or VP-710 or VP-720
2 test probe covers (GS38)
2 batteries 1.5 V, IEC LR 03 (AAA)
(for VP-710 and VP-720 only)
1 user manual

Accessories:

Carrying case CC-VP-7xx
Order No. 3889931

Ordering Information:

Description	Order No.
VP-700-E	**3476390**
VP-710-E	**3889905**
VP-720-E	**3889922**
CC-VP-7xx	**3889931**

~ AC | LED | V non contact

VP-440 RT

Non-contact VoltProbe®

Functions
- Non-contact, optical detection of AC voltages
- Fast, accurate detection of cable breaks in open-ended cables, e.g. cable drums, extension leads

Product information
- Compact, handy design that fits in any pocket
- Wide range of applications in trade and industry

Technical Data

Display:	1 LED
Voltage range:	50…1000 V AC
On-time:	continuously
Measurement category:	CAT III/1000 V
Safety cert.:	EN 61010
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	160 x 25 x 21 mm
Weight:	approx. 55 g

Scope of supply:

1 x VP-440
2 x 1.5 V battery, IEC LR03
1 x user manual

Ordering Information:

Description	Order No.
VP-440 RT	**2744768**

~ AC | LED | V non contact

VP-450-E

Non-contact volt probe

Functions
- Non-contact, optical and acoustic detection of AC voltages
- Fast, accurate detection of cable breaks in open-ended cables, e.g. cable drums, extension leads

Product information
- Reliable, automatic self-test of activated device with optical readiness indicator
- Compact, handy design that fits in any pocket
- Wide range of applications in trade and industry

Product highlights
- On/off switch

Technical Data

Display:	1 LED
Voltage range:	50…600 V AC
Frequency range:	50…500 Hz
On-time:	continuously
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	140 x 24 x 20 mm
Weight:	approx. 50 g

Scope of supply:

1 x VP-450-E
2 x 1.5 V battery, IEC LR03
1 x user manual

Ordering Information:

Description	Order No.
VP-450-E	**3454746**

~ AC | Rx | LED | V non contact | flashlight

VP-460-E

Non-contact volt probe with screwdriver insert

Functions
- Non-contact, optical and acoustic detection of AC voltages
- Direct voltage test via screwdriver blade
- Continuity test
- Fast, accurate detection of cable breaks in open-ended cables, e.g. cable drums, extension leads

Product information
- Reliable, automatic self-test of activated device with optical readiness indicator
- Compact, handy design that fits in any pocket

Product highlights
- Integrated, ultra-bright flashlight
- Fixed, high-quality screwdriver insert (chrome, vanadium, molybdenum blade)

Technical Data

Display:	2 LEDs
Voltage range:	50…600 V AC
Frequency range Voltage:	50…500 Hz
Continuity test:	0…3 MΩ
Test current:	approx. 0.3 µA
On-time:	continuously
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	160 x 25 x 21 mm
Weight:	approx. 55 g

Scope of supply:

1 x VP-460-E
2 x 1.5 V battery, IEC LR03
1 x user manual

Ordering Information:

Description	Order No.
VP-460-E	**3454754**

Voltage tester/Phase sequence indicator

MT-2000-E

Non-contact volt probe with magnetic field detection

Functions
- Non-contact, optical and acoustic detection of AC voltages
- Fast, accurate detection of cable breaks in open-ended cables, e.g. cable drums, extension leads
- Optical signal for detection of magnetic fields, e.g. on magnetic coils or permanent magnets

Product information
- Compact, handy design that fits in any pocket
- Wide range of applications in trade and industry

Technical Data

Display:	2 LEDs
Voltage range:	50…600 V AC
Frequency range	
Voltage:	50…500 Hz
On-time:	continuously
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	140 x 24 x 20 mm
Weight:	approx. 50 g

Scope of supply:

1 x MT-2000-E
2 x 1.5 V battery, IEC LR03
1 x user manual

Ordering Information:

Description	Order No.
MT-2000-E	**3454731**

PRM-4

Phase sequence indicator and motor rotation tester

Functions
- Displays phase sequence
- Displays motor rotation

Product information
- Fast detection of phase sequence in three-phase system
- De-energised, safe detection of three-phase motor connections, i.e. the anticipated rotation direction is indicated before the motor is started

Technical Data

Voltage range:	100…600 V AC
Frequency range:	45…70 Hz
Pollution degree:	2
Measurement category:	CAT III/600 V
Power supply:	1 x 9 V battery, IEC 6F22
Dimensions:	139 x 68 x 32 mm
Weight:	approx. 200 g

Scope of supply:

1 x PRM-4
1 x carrying case
3 x crocodile clip
1 x 9 V battery, IEC 6F22
1 x user manual

Ordering Information:

Description	Order No.
PRM-4	**3239635**

Cable locators

AMPROBE®

NEW

AT-3500

Underground cable/pipe locator

Functions

- Localisation and tracing of cables and pipes in the ground
- Simplified locator function enables localisation of cable or pipe damage
- Determination of the location, depth and alignment of metal conductors
- Optical and acoustic display

Product Information

- Set consisting of transmitter, receiver and measuring accessories
- Different measuring functions enable a high degree of precision:
  - Passive via mains frequency
  - Passive via radio signals
  - Active by means of signal generator
- Transmitter with voltage-stable output
- Extensive range of accessories available

Product Highlights

- Large display with simple menu navigation and background light
- Robust construction for use in bad weather and harsh environments

Technical Data

Transmitter T-3500	
Transmission power	0.1 W / 0.5 W (switchable)
Frequency	32.768 kHz
Power supply	6 x batteries, IEC R20 / D / Mono
Operating time	40 hours (for operation with interruptions with alkaline batteries, 20 °C)
Protection degree	IP 56
Dimensions	260 x 255 x 140 mm
Weight	1.7 kg
Receiver R-3500	
Frequency ranges	Range 1: Radio 15…23 kHz Range 2: Mains frequency 50/60 Hz Range 3: Transmitter 32.768 kHz
Sensitivity	Range 1: Radio > 20 µA Range 2: Mains frequency > 7 mA Range 3: Transmitter > 5 µA
Depth range	0.1 m…5 m
Resolution	0.1 m
Precision	Range 1: Radio ± 20 % Range 2: Mains frequency ± 20 % Range 3: Transmitter ± 5 % (> 5 m), ± 20 % (< 5 m)
Power supply	10 x batteries 1.5 V, IEC R6 / AA / Mignon
Operating time	40 hours (for operation with interruptions with alkaline batteries, 20 °C)
Protection degree	IP 67 from lower edge of receiver to lower edge of battery compartment and IP 56 for all parts outside of this description
Dimensions	approx. 99 x 660 x 252 mm
Weight	approx. 2.5 g

Scope of Supply:

1 R-3500 receiver
1 T-3500 transmitter
1 user manual
2 test leads
2 crocodile clips
1 earth stake
10 batteries 1.5 V, IEC R6/AA/Mignon
6 batteries 1.5 V, IEC R20/D/Mono
1 robust carrying case

Accessories:

MLS55-3,
tube transmitter for AT-3500

SC-3500, feed current clamp for AT-3500

Ordering Information:

Description	Order No.
AT-3500	**3435058**
MLS55-3	**3435099**
SC-3500	**3435073**

AT-3500

Cable Detector for Location of Cables and Pipes in the Ground

Keep productivity high and operational costs low, with the AT-3500. It's the rugged, economical solution for locating underground energized and de-energized wires, cables and pipes. Great for parking lot and airport lighting applications, it precisely pinpoints buried services, with exceptionally fast sound and meter response. The backlight multiple-segment bar-graph digital display plus audible indicators show and tell. The AT-3500 employs the proven 33 kHz frequency for most locating applications. To avoid lines at utility construction sites, it also offers the highly sensitive power and radio modes.

Take depth measurements with the press of a button.

Cable locator

AT-5000

AT-5005

AT-5000
Underground Cable/ Pipe Locator System

Functions
- Localisation and tracing of cables and pipes in the ground
- The new technology enables cables to be located quickly and exactly
- "Navigation compass" to facilitate localisation and tracing of cables or pipes
- Optical and acoustic display

Product Information
- Set consisting of transmitter, receiver and measuring accessories
- VGA colour display
- Different measuring functions enable a high degree of precision:
  - Passive via mains frequency
  - Passive via radio signals
  - Active by means of signal generator
- Manual and automatic sensitivity control
- Numerous active frequencies
- Selectable inductive output
- Locator depth up to 6 m
- Extensive range of accessories available

Product Highlights
- Robust construction for use in bad weather and harsh environments
- Optionally also with sheath fault locator function (accessory A-5000)

AT-5005
Underground cable/ pipe locator system set

similar as AT-5000, however scope of supply also includes frame for the sheath fault locator (A-5000)

Technical Data

Transmitter T-5000	
Transmission power	variable up to 10 W
Frequency	passive: 50, 60, 100 and 120 Hz active: adjustable from 491 Hz to 166 kHz
Power supply	NiMH rechargeable or 6 x batteries, 1.5 V D/LR20 or plug-in power pack (not included in scope of supply)
Operating time	approx. 6-12 hours for continuous operation
Protection degree	IP 54
Dimensions	approx. 279 x 171 x 229 mm
Weight	approx. 3.7 g
Receiver R-5000	
Depth range	max. 6 m
Precision	0…3 m: ± (5 %+5 cm) 3…6 m: ± 10 %
Power supply	Li ion, rechargeable or 9 x batteries 1.5 V, AA/LR6
Operating time	30 hours (continuous operation)
Protection degree	IP 54
Dimensions	approx. 210 x 337 x 743 mm
Weight	approx. 2.2 g

A-5000

Scope of supply AT-5000/AT-5005:

1 R-5000 receiver
1 T-5000 transmitter
1 A-5000, A-frame (at AT-5005 only)
1 user manual
1 CK-5000 test leads and earth stake
9 batteries 1.5 V, IEC LR6/AA
6 batteries 1.5 V, IEC LR20/D
1 robust carrying case

Accessories (AT-5000):

M-5000, tube transmitter	Best.-Nr. 3434971
A-5000, A-frame	Best.-Nr. 3434926
EPS-5000, international charging kit	Best.-Nr. 3435020
BT-5000, battery pack for transmitter	Best.-Nr. 3434998
BR-5000, battery pack for receiver	Best.-Nr. 3435012
SC-5000, feed current clamp	Best.-Nr. 3434959

Ordering Information:

Description	Order No.
AT-5000	**3434903**
AT-5005	**3475740**
A-5000	**3434926**
M-5000	**3434971**
EPS-5000	**3435020**
BT-5000	**3434998**
BR-5000	**3435012**
SC-5000	**3434959**

AT-5000/AT-5005

Underground Cable/ Pipe Locator System

Buried utilities represent a major challenge to electricians who need to trace and trouble shoot such systems. They also represent a hazard to excavation crews. Improperly performed digging can cause cable or pipe damage resulting in personal injury, costly repairs and penalties. This product is faster and more accurate than what's available on the market today.

Using superior design and powerful software, the AT-5000 offers several new performance features, establishing them as the new standard for locating and pinpointing faults in the underground systems. Distance sensitive left/right indication guides the user to the exact location of the buried utilities which saves time and effort not available on standard locators.

The signal select and distortion alert provide superior accuracy by visually indicating a clean signal of the traced line, versus "ghost" and "return" path of false signals coming from the neighboring lines, and keeping the user on the target line.

The core of the AT-5000 utility locating systems is the ergonomically designed handheld receiver. Designed for comfort, the lightweight receiver is balanced for all day use. The receiver's bright color display is complete with intuitive, easily read graphics that can be viewed in all lighting conditions.

Cable locator

AMPROBE®

AT-2032E
Cable locator

Functions
- Targeted locating of cables in walls as well as interruptions and short circuits in cables
- Locating of fuses and assignment to circuits
- Locating of accidentally concealed sockets and distribution boxes
- Locating of interruptions and short circuits in unshielded underfloor heating
- Tracing of metallic water and heating pipes

Product information
- Set consisting of transmitter and receiver in a robust, shock-proof case
- Transmitter signal is indicated optically and acoustically
- Clear, easy-to-follow instruction manual with application examples
- Additional transmitters are available for extension purposes or to distinguish between multiple signals

Product highlights
- All application areas (live or de-energised) are covered without the need for additional devices
- Accurate locating by means of displaying a specified letter on the receiver

Technical Data

Display:	LED bar for intensity and 7-segment display on receiver for number or letter indicating the transmitter code
Tracing depth:	0…40 cm
Withstand voltage:	250 V
Measurement category:	CAT II/250 V
Pollution degree:	2
Safety cert.:	EN 61010-1/IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61 (receiver); 2 x 9 V battery, IEC 6LR61 (transmitter)
Dimensions:	380 x 305 x 90 mm (case)
Weight:	approx. 1.8 kg

(USA) Patent 5418447

(D) Patent 4103234

Scope of supply:

1 x cable locator receiver
1 x cable locator transmitter
4 x test leads
3 x 9 V battery, IEC 6LR61
2 x crocodile clips, red/black
2 x test probes
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
AT-2032E	**3390365**

ECB50A-FGIS
Fuse finder for live circuits

Functions
- Fast and accurate locating of fuses and assignment to circuits
- Locating and tracing of cables in walls

Product information
- Set consisting of transmitter and receiver in robust carrying case
- Transmitter signal displayed optically and acoustically by the receiver
- Transmitter with integrated schuko plug enabling easy connection to the schuko socket
- Simple switching between fuse and cable finder function
- Continuous sensitivity adjustment of receiver

Information:
ECB50A-E with UK plug also available

Technical Data

Display:	2 LEDs and 7-segment display on receiver for letter indicating the code of the transmitter
Tracing depth (fuse finder):	0…10 cm
Tracing depth (cable locator):	0…40 cm
Voltage range:	100…250 V AC (50…60 Hz)
Measurement category:	CAT III/300 V
Pollution degree:	2
Safety cert.:	EN 61010-1/IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61 (receiver) Mains power supply (transmitter)
Dimensions:	180 x 120 x 45 mm (case)
Weight:	approx. 250 g (set)

Scope of supply:

1 x ECB50A transmitter
1 x ECB50A receiver
1 x 9 V battery, IEC 6LR61
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
ECB50A-FGIS	**3027106**
ECB50A-E	**3027097**

Cable tester/Ultrasonic leak detector

LAN-1
LAN Cable Tester

Functions
- Test for wiring foults of LAN cable
- Check Open, Short, Reversed, Crossed and Split Pairs
- Check of shielding

Product information
- Test pin configuration for:
  - 10/100 base -T cable
  - 10 base-2 cable
  - RJ45 modular cables
  - AT&T 258A cable
  - EIA / TIA 568A/568B cables
  - Token Ring Cable
- Test installed cable on wall plate or the patch panels by using the Remote Termination module
- Perform Loopback Test or Remote Test
- Buzzer sound warning for error condition in cable

Technical Data

Display	Two sets of LED lights for Source and Test indication
Connector types	RJ45, BNC
Maximum line length	> 300 meters
Power Supply	9 V battery, IEC 6F22
Dimensions	130 x 56 x 38 mm
Weight	1.26 kg

Scope of supply:

1 x LAN-1 Cable tester
1 x remote terminator
1 x 9 V battery, IEC 6F22
1 x RJ45 to female BNC cable
1 x RJ45 to male BNC cable
1 x RJ45 to RJ45 cable
1 x female BNC to female BNC connector
1 x users manual

Ordering Information:

Description	Order No.
LAN-1	**3052401**

TMULD-300
Ultrasonic leak detector kit

Functions
- Pressurised air leaks (HGV pressurised air, braking and suspension systems), leaks in refrigeration, air-conditioning and heating systems, leaks in steam lines etc.
- Automotive leaks, e.g. in windscreens and door seals

Product information
- Kit consisting of ultrasonic leak detector (ULD-300) and ultrasonic transmitter (UT-300) in robust carrying case
- Leaks indicated optically and acoustically

Information:
Sounds above 20 kHz cannot be heard by the human ear. Even the smallest leaks in pressurised air and gas systems cause turbulences, which in turn generate ultrasonic sounds. The ULD-300 detects these sounds and pinpoints the exact location of the leak. The ULD-300 indicates leaks optically (10-stage LED scale) and acoustically (headphones) and features a thumb wheel for setting the device's sensitivity.

Technical Data

ULD-300	35 kHz...45 kHz ±6 dB
Power supply	9 V battery, IEC 6LR61 (each device)
Display	LED
Frequency range	
UT-300	40 kHz
Dimensions	
ULD-300	65 x 185 x 25 mm
UT-300	65 x 165 x 25 mm
Weight	
ULD-300	approx. 150 g (incl. Battery)
UT-300	approx. 160 g (incl. Battery)

Scope of supply:

1 x ultrasonic leak detector ULD-300
1 x ultrasonic transmitter UT-300
1 x headphones
1 x extension + parabolic attachment
2 x 9 V battery, IEC 6LR61
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
TMULD-300	**2731543**

ULD-300
Ultrasonic leak detector

Functions
- Pressurised air leaks (HGV pressurised air, braking and suspension systems), leaks in refrigeration, air-conditioning and heating systems, leaks in steam lines etc.

Product information
- Leaks indicated optically and acoustically

Technical Data

ULD-300:	35 kHz…45 kHz ±6 dB
Power supply:	1 x 9 V battery, IEC 6LR61
Display:	LED
Dimensions	ULD-300: 65 x 185 x 25 mm
Weight	ULD-300: approx. 150 g (incl. battery)

Scope of supply:

1 x ultrasonic leak detector ULD-300
1 x headphones
1 x 9 V battery, IEC 6LR61
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
ULD-300	**2734431**

Model	AM-220	AM-240	DM7C	DM9C	DM 73C	DM 78C	PM51A	PM55A	HD 160C
Page	11	11	12	12	13	13	14	14	15
Display max. reading	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3½-digit, 1999 Digits	3¾-digit, 4000 Digits	3¾-digit, 3400 Digits	3¾-digit, 3200 Digits	¾-digit, 4000 Digits	3¾-digit, 6000 Digits	4-digit, 9999 Digits
True RMS measurement									AC
Bargraph					•	•			
Measurement ranges									
AC voltage	1 mV... 600 V	mV... 600 V	1 mV...600 V	1 mV…600 V	0.001 V... 600 V	0.001 V... 600 V	0.001 V...600 V	0.001 V...600 V	0.1 mV... 1000 V
Basic accuracy*	(1.5 %+3D)	(1.5 %+3D)	(1.5 % + 3 D)	(1.3 % + 5 D)	(1.5% + 8 D)	(4.0% + 5 D)	(2.0% + 5 D)	(1.5% + 5 D)	(1.2 % + 10 D)
Frequency range	40...400 Hz	40...400 Hz		50...400 Hz	50...500 Hz	50...60 Hz	50...500 Hz	50...60 Hz	45 Hz...2 kHz
DC voltage	1 mV... 600 V	1 mV... 600 V	1 mV...600 V	0.1 mV...600 V	0.1 mV... 600 V	0.1 mV... 600 V	0.1 mV...600 V	0.001 V... 450 V	0.1 mV... 1500 V
Basic accuracy*	(0.5%+2D)	(0.5%+2D)	(1.2 % + 3 D)	(0.8 % + 3 D)	(0.5% + 2 D)	(2.0% + 2 D)	(1.0% + 2 D)	(0.5% + 3 D)	(0.1% + 5 D)
AC current	1 µA... 10 A	1 µA...10 A		0.01 mA...15 A				0.1 µA... 2000 µA	0.01 µA... 2 A
Basic accuracy*	(1.5%+3D)	(1.5%+3D)		(1.5 % + 3 D)				(1.5% + 3 D)	(0.8 % + 4 D)
Frequency range	40 Hz...400 Hz	40 Hz...400 Hz		50...200 Hz				50…60 Hz	45 Hz...1 kHz
DC current	1 µA…10 A	1 µA…10 A	200 mA	0.01 mA…15 A				0.1 µA... 2000 µA	0.01 µA...2 A
Basic accuracy*	(1.2%+3D)	(1.2%+3D)	(2 % + 3 D)	(1.5 % + 3 D)				(1.2% + 3 D)	(1.5%+ 10 D)
Resistance	0.1Ω…40 MΩ	0.1Ω…40 MΩ	1Ω…2 MΩ	0.1 Ω…40 MΩ	0.1 Ω…34 MΩ	0.1Ω…32 MΩ	0.1 Ω…40 MΩ	0.1 Ω…6 MΩ	0.1 Ω…40 MΩ
Diode and continuity test	•	•		•	•	•	•	•	•
Capacitance	40 nF…4000 µF	40 nF…4000 µF					0.1 nF...3000 µF	0.1 nF...100.0 µF	0.01 nF... 400,0 µF
Frequency	10 Hz…10 MHz	10 Hz…10 MHz					5 Hz...1 MHz	10 Hz...30.00 kHz	0.01 Hz…10 MHz
Temperature		-50...750°C							-20…1300 °C
Measurement range selection									
Automatic	•	•		•	•	•	•	•	•
Manual	•	•	•			•			•
Data Hold	•	•			•	•	•	•	•
Min/Max value memory	•	•							•
Peak Hold									
Relative value display	•	•							
Data logger/interface									
Auto-Power-Off	•	•		•	•	•	•	•	•
Battery	2 x 1.5 V	2 x 1.5 V	1 x 9 V	2 x 1.5 V	2 x 1.5 V	2 x 1.5 V	1 x 3 V	1 x 3 V	1 x 9 V
Measuring circuit category	CAT III/600 V	CAT III/600 V	CAT II/600 V	CAT II/600 V	CAT III/300V, CAT II/600V	CAT III/300V, CAT II/600V	CAT III/300V, CAT II/600V	CAT III/300V, CAT II/600V	CAT IV/1000V
Special features	Large, easily readable LCD display with backlight	Large, easily readable LCD display with backlight, incl. Temperature probe	Batterytest 1,5 V and 9 V		Compact measuring device in pen design	Compact digital multimeter in card format	Compact digital multi-meter in card format Large, easy-to-read display	Compact digital multimeter in card format, Automatic function selection of voltages and resistance, Non-contact voltage detection	Highest safety rating of CAT IV/1000 V Backlight

* Basic accuracy refers to the best accuracy in the respective function

Model	5 XP-A	15 XP-B	35 XP-A	30 XR-A	33 XR-A	34 XR-A	37 XR-A	38 XR-A	LCR 55A
Page	15	16	16	17	17	18	18	19	19
Display max. reading	3½-digit, 1999 Digits	3½-digit, 1999 Digits	3¾-digit, 3999 Digits	3½-digit, 1999 Digits	3¾-digit, 3999 Digits	3¾-digit, 3999 Digits	4-digit, 9999 Digits	4-digit, 9999 Digits	3½-digit,1999 Digits
True RMS measurement						AC	AC	(AC+DC)	
Bargraph					•	•	•	•	
AC voltage	0.1 mV…750 V	0.1 mV…750 V	0.1 mV...750 V	0.1 mV... 600 V	0.1 mV... 750 V	0.1 mV... 750 V	0.1 mV... 750 V	0.1 mV... 750 V	
Basic accuracy*	(1.5% + 5 D)	(1.5% + 5 D)	(1.5% + 5 D)	(1.5 %+4D)	(1.5 %+4D)	(1.2 %+8D)	(1.2%+10 D)	(1.2% + 10 D)	
Frequency range	45…500 Hz	45…500 Hz	45…500 Hz	45 Hz...500 Hz	45 Hz...500 Hz	45 Hz...2 kHz	45 Hz...2 kHz	45 Hz...2 kHz	
DC voltage	0.1 mV…1000 V	0.1 mV…1000 V	0.1 mV…1000 V	0.1 mV... 600 V	0.1 mV... 1000 V	0.1 mV... 1000 V	0.1 mV... 1000 V	0.1 mV... 1000 V	
Basic accuracy*	(1% + 1 D)	(0.5% + 1 D)	(0.5% + 1 D)	(1%+1D)	(0.7%+1D)	(0.5%+1D)	(0.1%+5 D)	(0.25% + 5 D)	
AC current	0.1 µA…200 mA	1 µA…2 A	0.1 µA…2 A	1 µA...10 A	1 µA...10 A	0.1 µA...10 A	0.01 µA... 10 A	0.1 µA... 10 A	
Basic accuracy*	(2% + 5 D)	(1.5% + 5 D)	(1.5% + 5 D)	(2%+4D)	(1.5%+4D)	(1.5%+8D)	(1.5%+10 D)	(1.5%+20 D)	
Frequency range	45…500 Hz	45…500 Hz	45…500 Hz	45 Hz...500Hz	45 Hz...500Hz	45 Hz...1 kHz	45 Hz...1 kHz	45 Hz...1 kHz	
DC current	0.1 µA…200 mA	1 µA…2 A	0.1 µA…2 A	0.1 µA…10 A	0.1 µA…10 A	0.1 µA…10 A	0.01 µA... 10 A	0.1 µA... 10 A	
Basic accuracy*	(1.5% + 5 D)	(1.2% + 3 D)	(1.0% + 2 D)	(2.0% + 3 D)	(1%+1D)	(1%+1D)	(0.5%+10 D)	(0.5%+10 D)	
Resistance	0.1 Ω…20 MΩ	0.1 Ω…2000 MΩ	0.1 Ω…40 MΩ	0.1Ω…20 MΩ	0.1Ω…4 MΩ	0.1Ω…40 MΩ	0.1Ω…40 MΩ	0.1 Ω...40 MΩ	0.01Ω…20 MΩ
Diode and continuity test	•	•	•	•	•	•	•	•	•
Capacitance			4.000 nF...4.000 mF		4.000 nF... 4.000 mF	4.000 nF... 4.000 mF	0.01 nF... 400,0 µF	0.01 nF... 400,0 µF	1 pF... 2000 µF
Frequency			10.00 Hz…1 MHz		10.00 Hz…1 MHz	10.00 Hz…1 MHz	3.00Hz...10MHz	3.00 Hz...10 MHz	
Temperature			-20…1000 °C		-20…1000 °C	-20…1000 °C		-20...1300 °C	
Automatic		•	•			•	•	•	
Manual	•	•	•	•	•	•	•	•	•
Data Hold	•	•	•	•	•	•	•	•	•
Min/Max value memory	•			•	•	•	•	•	•
Peak Hold					•	•	•	•	
Relative value display					•	•	•	•	
Data logger/interface								- / RS-232	
Auto-Power-Off		•	•		•	•	•	•	•
Battery	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V
Measuring circuit category	CAT III/300 V, CAT II/600 V	CAT III/600 V, CAT II/1000 V	CAT III/300 V CAT II/600 V	CAT III/300 V, CAT II/600 V	CAT III/600 V, CAT II/1000 V	CAT III/600 V, CAT II/1000 V	CAT III/600V, CAT II/1000V	CAT IV/600V, CAT III/1000V	
Special features	Non-contact voltage detection (NCV), Batterytest 1,5 V/9 V, Magnetic holder (MagneGrip™)	Logic test function (TTL), Non-contact voltage detection (NCV), Magnetic holder (MagneGrip™)	Non-contact voltage detection (NCV), Magnetic holder (MagneGrip™)	Non-contact voltage detection Battery test 1.5 V/9 V Magnetic holder (MagneGrip™)	Magnetic holder (MagneGrip™)	Backlight, Duty cycle function Magnetic holder (MagneGrip™)	Inductance measurement Audible warning signal in case of wrong jack assignment Logic test Magnetic holder (MagneGrip™) Backlight	Current loop measurement (4...20 mA), Software available as an option Magnetic holder (MagneGrip™) Backlight	**Measurement of inductance** (1 µH…200 H) Transistor test Diode test

* Basic accuracy refers to the best accuracy in the respective function

Multimeter

AMPROBE®

Auto/ Manuell Range | CAT III 600 V | Hz | Data Hold

AM-220

Full-featured digital multimeter

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX data hold
- Relative measurement
- Auto power-off

Product highlights
- Large, easily readable LCD display with backlight

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
AC voltage:	1 mV…600 V
Basic accuracy:	±(1.5% rdg. + 3 digits)
Frequency range:	40…400 Hz
DC voltage:	1 mV…600 V
Basic accuracy:	±(0.5% rdg. + 2 digits)
Input resistance:	10 MΩ
Current AC:	1 µA…10 A
Basic accuracy:	±(1.5% rdg. + 3 digits)
Frequency range:	40…400 Hz
Current DC:	1 µA…10 A
Basic accuracy:	±(1.2% rdg. + 3 digits)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(1% rdg. + 2 digits)
Continuity:	R < 50 Ω
Frequency:	10.00 Hz…10 MHz
Basic accuracy:	±(0.1% rdg. + 5 digits)
Capacitance:	40.00 nF…4000 µF
Basic accuracy:	±(2.5% rdg. + 5 digits)
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	2 x 1.5 V battery, IEC LR6
Dimensions:	156 x 86 x 38 mm
Weight:	approx. 260 g (incl. battery)

Scope of supply:

1 x AM-220
2 x test leads
2 x 1.5 V battery, IEC LR6
1 x user manual

Accessories:

Carrying case VC30A

Test lead set TL245A

Ordering Information:

Description	Order No.
AM-220	**2730925**
VC30A	**3068280**
TL245A	**3034444**

Auto/ Manuell Range | CAT III 600 V | Hz | Data Hold | °C

AM-240

Cost-effective multimeter with temperature function

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Temperature measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX data hold
- Relative measurement
- Auto power-off

Product highlights
- Large, easily readable LCD display with backlight

Technical Data

Display:	3¾-digit, LCD, 4000 digits
Measurement ranges	
AC voltage:	1 mV...600 V
Basic accuracy:	±(1,5% rdg. + 3 digits)
Frequency range:	40...400 Hz
DC voltage:	1 mV...600 V
Basic accuracy:	±(0,5% rdg. + 2 digits)
Input resistance:	10 MΩ
Current AC:	1 µA...10 A
Basic accuracy:	±(1,5% rdg. + 3 digits)
Frequency range:	40...400Hz
Current DC:	1 µA...10 A
Basic accuracy:	±(1,2% rdg. + 3 digits)
Resistance:	0,1 Ω...40 MΩ
Basic accuracy:	±(1 % rdg. + 2 digits)
Continuity:	R < 50 Ω
Frequency:	10,00 Hz...10 MHz
Basic accuracy:	±(0,1% rdg. + 5 digits)
Capacitance:	40,00 nF...4000 µF
Basic accuracy:	±(2,5% rdg. + 5 digits)
Temperature measurement	-50°C...750°C
Basic accuracy:	± (1,5% +2°C)
Pollution degree:	2
Measurement category:	CAT III/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	2 x battery 1,5 V, IEC LR6
Dimensions:	156 x 86 x 38 mm
Weight:	approx. 260 g (incl. battery)

Scope of supply:

1 x AM-240
2 x test leads
2 x 1.5 V battery, IEC LR6
1 x temperature probe
1 x user manual

Accessories:

Carrying case VC30A

Test lead set TL245A

Ordering Information:

Description	Order No.
AM-240	**2730933**
VC30A	**3068280**
TL245A	**3034444**

Multimeter

DM7C
Compact digital multimeter

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test
- 1.5 V and 9 V battery test

Product information
- Manual range selection
- Shock-proof and impact-resistant thanks to standard protective holster

Manual Range | CAT II 600 V | Battery Test

Technical Data

Display:	LCD, 3 1/2-digit, 1999 digits
Measurement ranges	
AC voltage:	1 mV…600 V
Tolerance:	±(1.5% rdg. + 3 digits)
DC voltage:	1 mV…600 V
Tolerance:	±(1.2% rdg. + 3 digits)
Input resistance:	460 kΩ
Current DC:	200 mA
Tolerance:	±(2% rdg. + 3 digits)
Resistance:	1 Ω…2 MΩ
Tolerance:	±(1.5% rdg. + 3 digits)
Voltage (AC):	50…1000 Hz
Pollution degree:	2
Measurement category:	CAT II/600 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	170 x 85 x 50 mm
Weight:	410 g

Scope of supply:
1 x DM7C
1 x holster
2 x test leads
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case VC20A

Test lead set TL245A

Ordering Information:

Description	Order No.
DM7C	**2727756**
TL245A	**3034444**

DM9C
Compact digital multimeter

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test

Product information
- Automatic range selection
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Auto Range | CAT II 600 V

Technical Data

Display:	LCD, 3 3/4-digit, 4000 digits
Measurement ranges	
AC voltage:	1 mV…600 V
Tolerance:	±(1.3% rdg. + 5 digits)
DC voltage:	0.1…600 V
Tolerance:	±(0.8% rdg. + 3 digits)
Input resistance:	10 MΩ
Current AC:	0.01 mA…10 A/15 A (30 s)
Tolerance:	±(1.5% rdg. + 3 digits)
Current DC:	0.01 mA…10 A/15 A (30 s)
Tolerance:	±(1.5% rdg. + 3 digits)
Resistance:	0.1 Ω…40 MΩ
Tolerance:	±(1.5% rdg. + 3 digits)
Frequency range for	
Current (AC):	50…200 Hz
Voltage (AC):	50…400 Hz
Pollution degree:	2
Measurement category:	CAT II/600 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	170 x 85 x 50 mm
Weight:	410 g

Scope of supply:
1 x DM9C
1 x protective holster
2 x test leads
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case VC20A

Test lead set TL245A

Ordering Information:

Description	Order No.
DM9C	**2727763**
TL245A	**3034444**

Multimeter

AMPROBE®

Auto Range | CAT III 300 V | Bargraph | Data Hold

DM73C
Pen-design digital multimeter

Functions
- Voltage and resistance measurement
- Diode and acoustic continuity test

Product information
- Automatic range selection
- Integrated measurement memory (data hold)
- Additional bar graph display
- Auto power-off

Product highlights
- Compact multimeter in pen design

Technical Data

Display:	LCD, 3¾-digit, 3400 digits
Measurement ranges	
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 8 digits)
Frequency range:	50…500 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 2 digits)
Input resistance:	10 MΩ
Resistance:	0.1 Ω…34 MΩ
Basic accuracy:	±(1.0% rdg. + 4 digits)
Continuity:	R < 35 Ω
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	2 x 1.5 V battery, IEC LR44
Dimensions:	198 x 29 x 35 mm
Weight:	approx. 150 g (incl. battery)

Scope of supply:
1 x DM73C
1 x test lead
1 x crocodile clip
1 x test probe
2 x 1.5 V battery, IEC LR44
1 x user manual

Accessories:
Carrying case VC30A

Ordering Information:

Description	Order No.
DM73C	**2727739**
VC30A	**3068280**

Auto/ Manuell Range | CAT III 300 V | Bargraph | Data Hold

DM78C
Pocket multimeter in protective case

Functions
- Voltage and resistance measurement
- Diode and acoustic continuity test

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Additional bar graph display
- With fixed test leads in own protective case
- Auto power-off

Product highlights
- Digital multimeter in handy, pocket-sized case

Technical Data

Display:	LCD, 3¾-digit, 3200 digits
Measurement ranges	
AC voltage:	0.001…600 V
Basic accuracy:	±(4.0% rdg. + 5 digits)
Frequency range:	50…60 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(2.0% rdg. + 2 digits)
Input resistance:	10 MΩ
Resistance:	0.1 Ω…32 MΩ
Basic accuracy:	±(2.0% rdg. + 4 digits)
Continuity:	R < 35 Ω
Pollution degree:	2
Measurement category:	CAT III/300 V, CAT II/600 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	2 x 1.5 V battery, IEC LR44
Dimensions:	130 x 77 x 18 mm
Weight:	approx. 120 g (incl. battery)

Scope of supply:
1 x DM78C
2 x 1.5 V battery, IEC LR44
1 x user manual

Ordering Information:

Description	Order No.
DM78C	**3156830**

Multimeter

Auto Range | CAT III 300 V | Data Hold

PM51A

Pocket multimeter with frequency and capacitance measurement

Functions
- AC/DC voltage measurement
- Resistance measurement
- Diode and acoustic continuity test
- Capacitance and frequency measurement

Product information
- Automatic range selection
- Integrated measurement memory (data hold)
- Fixed test leads
- Auto power-off

Product highlights
- Compact digital multimeter in card format
- Large, clear display

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
AC voltage:	0.001…600 V
Basic accuracy:	±(2.0% rdg. + 5 digits)
Frequency range:	50…500 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(1.0% rdg. + 2 digits)
Input resistance:	10 MΩ
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(1.5% rdg. + 6 digits)
Continuity:	R < 65 Ω
Frequency:	5 Hz…1 MHz
Basic accuracy:	±(0.5% rdg. + 4 digits)
Capacitance:	0.1 nF…3000 µF
Basic accuracy:	±(3.5% rdg. + 6 digits)
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 3 V battery, IEC CR2032
Dimensions:	113 x 53 x 10 mm
Weight:	approx. 78 g (incl. battery)

Scope of supply:

1 x PM51A
1 x 3 V battery, IEC CR2032
1 x user manual

Accessories:

Carrying case VC3A

Ordering Information:

Description	Order No.
PM51A	**2727700**
VC3A	**3099130**

Auto Range | CAT III 300 V | V non contact | Data Hold | Hz

PM55A

Pocket multimeter with non-contact voltage detection (VolTect™) and auto function selection (AutoTect™)

Functions
- Voltage and resistance measurement
- Diode and acoustic continuity test
- Voltage measurement (AC/DC µA range)
- Capacitance and frequency measurement
- Non-contact voltage detection (VolTect™)

Product information
- Automatic range selection
- Integrated measurement memory (data hold)
- Includes rubber holster and auto power-off function

Product highlights
- Compact digital multimeter in card format
- Large, clear display
- Automatic function selection of voltage and resistance (AutoTect™)

Technical Data

Display:	LCD, 3¾-digit, 6000 digits
Measurement ranges	
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…60 Hz
DC voltage:	0.001…450 V
Basic accuracy:	±(0.5% rdg. + 3 digits)
Current AC:	0.1 µA…2000 µA
Basic accuracy:	±(1.5% rdg. + 3 digits)
Frequency range:	50…60 Hz
Current DC:	0.1…2000 µA
Basic accuracy:	±(1.2% rdg. + 3 digits)
Resistance:	0.1 Ω…6.000 MΩ
Basic accuracy:	±(1.2% rdg. + 6 digits)
Continuity:	R < 175 Ω
Frequency:	10 Hz…30.00 kHz
Basic accuracy:	±(0.5% rdg. + 4 digits)
Capacitance:	0.1 nF…100.0 µF
Basic accuracy:	±(3.5% rdg. + 6 digits)
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 3 V battery, IEC CR2032
Dimensions:	113 x 53 x 10 mm
Weight:	approx. 78 g (incl. battery)

Scope of supply:

1 x PM55A
1 x 3 V battery, IEC CR2032
1 x carrying case
1 x user manual

Accessories:

Carrying case VC3A

Ordering Information:

Description	Order No.
PM55A	**2727721**
VC3A	**3099130**

Multimeter

AMPROBE®

Auto/ Manual Range | CAT IV 1000 V | Data Hold | Hz | True RMS | °C | IP 67

HD160C

Heavy-duty digital multimeter (TRMS)

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test
- Capacitance and frequency measurement
- Temperature measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX, relative and average value measurement
- Backlight
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Highest safety rating of CAT IV/1000 V
- High voltages (1000 V AC and 1500 V DC)
- Protection category: IP67

Technical Data

Display:	LCD, 4-digit, 9999 digits
Measurement ranges	
AC voltage:	0.1 mV…1000 V
Basic accuracy:	±(1.2% rdg. + 10 digits)
Frequency range:	45 Hz…2 kHz
DC voltage:	0.1 mV…1500 V
Basic accuracy:	±(0.1% rdg. + 5 digits)
Input resistance:	10 MΩ
Current AC:	0.01 µA…2 A
Basic accuracy:	±(0.8% rdg. + 4 digits)
Frequency range:	45 Hz…1 kHz
Current DC:	0.01 µA…2 A
Basic accuracy:	±(1.5% rdg. + 10 digits)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(1.0% rdg. + 10 digits)
Continuity:	R < 40 Ω
Frequency measurement:	0.01 Hz…10 MHz
Basic accuracy:	±(0.1% rdg. + 5 digits)
Capacitance measurement:	0.01 nF…400.0 µF
Basic accuracy:	±(3.0% rdg. + 10 digits)
Temperature:	-20°C…1300°C
Basic accuracy:	±(1.0% rdg. + 3°C)
Pollution degree:	2
Measurement category:	CAT IV/1000 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	200 x 102 x59 mm
Weight:	approx. 642 g (incl. battery)

Scope of supply:

1 x HD160C
2 x test leads
1 x magnetic holster
1 x temperature probe
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Test lead set TL245A

Carrying case VC221B

Ordering Information:

Description	Order No.
HD160C	**2670787**
TL245A	**3034444**
VC221B	**3068271**

Manual Range | CAT III 300 V | V non contact | Data Hold | min / max | Battery Test

5XP-A

Digital multimeter with non-contact voltage detection

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test

Product information
- Manual range selection
- Integrated measurement memory (data hold) and MIN/MAX hold
- Shock-proof and impact-resistant thanks to standard protective holster

Product highlights
- Non-contact voltage detection (NCV)
- Magnetic holster (Magne-Grip™)
- 1.5 V and 9 V battery test

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	45…500Hz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(1% rdg. + 1 digit)
Current AC:	0.1 µA…200 mA
Basic accuracy:	±(2% rdg. + 5 digits)
Frequency range:	45…500 Hz
Current DC:	0.1 µA…200 mA
Basic accuracy:	±(1.5% rdg. + 1 digit)
Resistance:	0.1 Ω…20 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 75 Ω
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	155 x 72 x 32 mm
Weight:	approx. 210 g (incl. battery)

Scope of supply:

1 x 5XP-A
2 x test leads
1 x magnetic holster
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case VC30A

Test lead set TL245A

Ordering Information:

Description	Order No.
5XP-A	**2727851**
VC30A	**3068280**
TL245A	**3034444**

Multimeter

Auto/ Manual Range | CAT III 600 V | Data Hold | V non contact

15XP-B

Digital multimeter with non-contact voltage detection and logic test

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test
- Logic test function (TTL)

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- Non-contact voltage detection (NCV)
- Magnetic holster (Magne-Grip™)

Technical Data

Display:	LCD, 3½-digit, 1999 Digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	45…500 Hz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.5% rdg. + 1 digit)
Current AC:	1 µA…2 A
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	45…500Hz
Current DC:	1 µA…2 A
Basic accuracy:	±(1.2% rdg. + 3 digits)
Resistance:	0.1 Ω…2000 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 25 Ω
Pollution degree:	2
Measurement category:	CAT III/600V, CAT II/1000V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	155 x 72 x 32 mm
Weight:	approx. 210 g (incl. battery)

Scope of supply:

1 x 15XP-B
2 x test leads
1 x magnetic holster
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case VC30A

Test lead set TL245A

Ordering Information:

Description	Order No.
15XP-B	**3534088**
VC30A	**3068280**
TL245A	**3034444**

Auto/ Manual Range | CAT III 300 V | Hz | °C

35XP-A

Compact digital multimeter

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Temperature measurement
- Measurement of ionisation currents in heating systems

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- Non-contact voltage detection (NCV)
- Magnetic holster (Magne-Grip™)

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	45…500Hz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.5% rdg. + 1 digit)
Current AC:	0.1 µA…2 A
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	45…500Hz
Current DC:	0.1 µA…2 A
Basic accuracy:	±(1.0% rdg. + 2 digits)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 25 Ω
Frequency:	10.00 Hz…1 MHz
Basic accuracy:	±(0.1% rdg. + 3 digits)
Capacitance:	4.000 nF…4.000 mF
Basic accuracy:	±(5% rdg. + 30 digits)
Temperature measurement:	-20°C…1000°C
Basic accuracy:	±(2.0% +4°C)
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	155 x 72 x 32 mm
Weight:	approx. 210 g (incl. battery)

Scope of supply:

1 x 35XP-A
2 x test leads
1 x flexible wire probe (0…200°C)
1 x type "K" probe adapter
1 x magnetic holster
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case VC30A

Test lead set TL245A

Ordering Information:

Description	Order No.
35XP-A	**2727849**
VC30A	**3068280**
TL245A	**3034444**

Multimeter

AMPROBE®

Manuell Range | CAT III 300 V | Batterie Test | Data Hold

30XR-A

Professional multimeter with non-contact voltage detection

Functions
- Voltage, current and resistance measurement
- Diode and acoustic continuity test
- 1.5 V and 9 V battery test

Product information
- Manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX data hold

Product highlights
- Non-contact voltage detection (NVC)
- Magnetic holster (Magne-Grip™)

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement ranges	
AC voltage:	0.1 mV…600 V
Basic accuracy:	±(1.5% rdg. + 4 digits)
Frequency range:	45…500Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(1% rdg. + 1 digit)
Input resistance:	10 MΩ
Current AC:	0.1 µA…10 A
Basic accuracy:	±(2% rdg. + 4 digits)
Frequency range:	45…500Hz
Current DC:	0.1 µA…10 A
Basic accuracy:	±(2.0% rdg. + 3 digits)
Resistance:	0.1 Ω…20 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 75 Ω
Pollution degree:	2
Measurement category:	CAT III/300V, CAT II/600V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	196 x 92 x 60 mm
Weight:	approx. 426 g (incl. battery)

Scope of supply:

1 x 30XR-A
2 x test leads
1 x magnetic holster
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case big, VC221B

Test lead set TL245A

Ordering Information:

Description	Order No.
30XR-A	**2727774**
VC221B	**3068271**
TL245A	**3034444**

Manuell Range | CAT III 600 V | Hz | °C | Data Hold | Bargraph

33XR-A

Professional multimeter with temperature measurement

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Temperature measurement

Product information
- Manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX, relative and peak value measurement
- Additional bar graph display (41 segments)
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- Magnetic holster (Magne-Grip™)

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.5% rdg. + 4 digits)
Frequency range:	45…500 Hz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.7% rdg. + 1 digit)
Input resistance:	10 MΩ
Current AC:	0.1 µA…10 A
Basic accuracy:	±(1.5% rdg. + 4 digits)
Frequency range:	45…500 Hz
Current DC:	0.1 µA…10 A
Basic accuracy:	±(1.0% rdg. + 1 digit)
Resistance:	0.1 Ω…4 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 35 Ω
Frequency measurement:	10.00 Hz…1 MHz
Basic accuracy:	±(0.1% rdg. + 3 digits)
Capacitance measurement:	4.000 nF…4.000 mF
Basic accuracy:	±(5% rdg. + 10 digits)
Temperature measurement:	-20°C…1000°C
Basic accuracy:	±(2.0% +4°C)
Pollution degree:	2
Measurement category:	CAT III/600V, CAT II/1000V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	196 x 92 x 60 mm
Weight:	approx. 400 g (incl. battery)

Scope of supply:

1 x 33XR-A
2 x test leads
1 x magnetic holster
1 x temperature adapter
1 x temperature probe (0…200°C)
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case big, VC221B

Test lead set TL245A

Ordering Information:

Description	Order No.
33XR-A	**2727788**
VC221B	**3068271**
TL245A	**3034444**

Multimeter

Auto/ Manual Range | CAT III 600 V | min / max | Hz | ⊣⊢
°C | Data Hold | Bargraph | ☀ | True RMS

34XR-A

Professional TRMS multimeter with temperature measurement and backlight

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Temperature measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX, relative and peak value measurement
- Additional bar graph display (41 segments)
- Backlight
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Magnetic holster (Magne-Grip™)
- Duty cycle function

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.2% rdg. + 8 digits)
Frequency range:	45 Hz…2 kHz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.5% rdg. + 1 digit)
Input resistance:	10 MΩ
Current AC:	0.1 µA…10 A
Basic accuracy:	±(1.5% rdg. + 8 digits)
Frequency range:	45…1 kHz
Current DC:	0.1 µA…10 A
Basic accuracy:	±(1.0% rdg. + 1 digit)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Continuity:	R < 35 Ω
Duty cycle:	0…90%
Accuracy:	(5 V logic) ±(2.0% rdg. + 5 digits)
Frequency:	10.00 Hz…1 MHz
Basic accuracy:	±(0.1% rdg. + 3 digits)
Capacitance:	4.000 nF…4.000 mF
Basic accuracy:	±(5% rdg. + 10 digits)
Temperature:	-20°C…1000°C
Basic accuracy:	±(2.0% +4°C)
Pollution degree:	2
Measurement category:	CAT III/600V, CAT II/1000V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	196 x 92 x 60 mm
Weight:	approx. 400 g (incl. battery)

Scope of supply:

1 x 34XR-A
2 x test leads
1 x magnetic holster
1 x temperature adapter
1 x temperature probe (0…200°C)
1 x 9 V battery, IEC 6LR61
1 x user manual

Ordering Information:

Description	Order No.
34XR-A	**2727795**
VC221B (Carrying case)	**3068271**
TL245A (Test lead set)	**3034444**

Auto/ Manual Range | CAT III 600 V | ◉ | min / max | Hz
⊣⊢ | Data Hold | Bargraph | ☀ | True RMS

37XR-A

Professional TRMS multimeter with component and logic test

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Inductance measurement
- Attenuation measurement (dBm)

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX, relative and peak value measurement
- Additional bar graph display (41 segments)
- Backlight
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Acoustic warning signal and display message in case of incorrect jack connections
- Magnetic holster (Magne-Grip™)
- Duty cycle function
- Logic test function (TTL, CMOS)

Technical Data

Display:	LCD, 4-digit, 9999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.2% rdg. + 10 digits)
Frequency range:	45 Hz…2 kHz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.1% rdg. + 5 digits)
Input resistance:	10 MΩ
Current AC:	0.01 µA…10 A
Basic accuracy:	±(1.5% rdg. + 10 digits)
Frequency range:	45 Hz…1 kHz
Current DC:	0.01 µA…10 A
Basic accuracy:	±(0.5% rdg. + 10 digits)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(0.5% rdg. + 8 digits)
Continuity:	R < 40 Ω
Duty cycle:	0…90%
Accuracy:	(5 V logic) ±(2.0% rdg. + 20 digits)
Frequency:	3.00 Hz…10 MHz
Basic accuracy:	±(0.1% rdg. + 5 digits)
Capacitance:	0.01 nF…400.0 µF
Basic accuracy:	±(3.0% rdg. + 10 digits)
Inductance:	1 µH…40.00 H
Basic accuracy:	±(5.0% rdg. + 30 digits)
Attenuation:	-13 dBm…+50 dBm
Basic accuracy:	±(0.7 dB + 8 digits)
Pollution degree:	2
Measurement category:	CAT III/600V, CAT II/1000V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	196 x 92 x 60 mm
Weight:	approx. 482 g (incl. battery)

Scope of supply:

1 x 37XR-A
2 x test leads
1 x magnetic holster
1 x 9 V battery, IEC 6LR61
1 x user manual

Ordering Information:

Description	Order No.
37XR-A	**2727808**
VC221B (Carrying case)	**3068271**
TL245A (Test lead set)	**3034444**

Multimeter / LCR-Meter

AMPROBE®

Auto/ Manual Range | CAT III 600 V | min / max | Hz | ⊣⊢ | Data Hold | °C | PC | ☀ | True RMS

38XR-A

Professional TRMS (AC+DC) multimeter with PC interface

Functions
- Voltage, current and resistance measurement
- Capacitance and frequency measurement
- Diode and acoustic continuity test
- Attenuation measurement (dBm)
- Temperature measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX, relative and peak value measurement
- Additional bar graph display (41 segments)
- Backlight
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- AC+DC true RMS measurement (TRMS)
- Magnetic holster (Magne-Grip™)
- Duty cycle function
- RS-232 interface for PC connection (optional „38SW-A" software available)
- Current loop measurement: 4…20 mA

Technical Data

Display:	LCD, 4-digit, 9999 digits
Measurement ranges	
AC voltage:	0.1 mV…750 V
Basic accuracy:	±(1.2% rdg. + 10 digits)
Frequency range:	45 Hz…2 kHz
DC voltage:	0.1 mV…1000 V
Basic accuracy:	±(0.25% rdg. + 5 digits)
Input resistance:	10 MΩ
Current AC:	0.1 µA…10 A
Basic accuracy:	±(1.5% rdg. + 20 digits)
Frequency range:	45 Hz…1 kHz
Current DC:	0.1 µA…10 A
Basic accuracy:	±(0.5% rdg. + 10 digits)
Resistance:	0.1 Ω…40 MΩ
Basic accuracy:	±(0.5% rdg. + 8 digits)
Continuity:	R < 40 Ω
Frequency:	3.00 Hz…10 MHz
Basic accuracy:	±(0.1% rdg. + 5 digits)
Capacitance:	0.01 nF…400.0 µF
Basic accuracy:	±(3.0% rdg. + 10 digits)
Temperature:	-20°C…1300°C
Basic accuracy:	±(1.0% rdg. + 3°C)
Current loop measurement:	4…20 mA ≙ 0…100%
Basic accuracy:	±(0.5% + 5 digits)
Attenuation:	-13 dBm…+50 dBm
Basic accuracy:	±(0.7 dB + 8 digits)
Pollution degree:	2
Measurement category:	CAT IV/600 V, CAT III/1000 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	196 x 92 x 60 mm
Weight:	approx. 492 g (incl. battery)

Scope of supply:

1 x 38XR-A
2 x test leads
1 x temperature probe (0…200°C)
1 x magnetic holster
1 x temperature adapter
1 x 9 V battery, IEC 6LR61
1 x user manual

Ordering Information:

Description	Order No.
38XR-A	**2727824**
38SW-A (Software and RS232-cable)	**2727813**
VC221B (Carrying case)	**3068271**
TL245A (Test lead set)	**3034444**

Manual Range | Data Hold | Max Hold

LCR55A

LCR-Meter

Functions
- Resistance measurement
- Capacitance measurement
- Inductance measurement
- Transistor and diode measurement

Product information
- Manual range selection
- Integrated measurement memory (data hold and MAX hold)
- Shock-proof and impact-resistant thanks to standard protective holster
- Auto power-off

Product highlights
- Large, clear display

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement ranges	
Resistance:	0.01 Ω…20 MΩ
Basic accuracy:	±(0.5% rdg. + 5 digits)
Continuity:	R < 30 Ω
Inductance:	1 µH…200 H
Basic accuracy:	±(3.0% rdg. + 20 digits)
Capacitance:	1 pF…2000 µF
Basic accuracy:	±(1.0% rdg. + 3 digits)
Diode test: voltage drop	
Accuracy:	±(1.5% rdg. +1 digit)
Transistor test:	(NPN, PNP) hfe, Iceo
Test current:	approx. 1 mA
Test voltage:	3.0 V DC typical
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	183 x 79 x 38 mm
Weight:	approx. 311 g (incl. battery)

Scope of supply:

1 x LCR55A
2 x test leads
2 x crocodile clips
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Carrying case CC-ACDC

Ordering Information:

Description	Order No.
LCR55A	**3026976**
CC-ACDC	**2732643**

Multimeter / Kits

AMPRB-EU01
Junior-Kit

Contents
- 15XP-B (digital multimeter)
- ACD-6 PRO (digital current clamp)
- TPP1-C1 (contact thermometer)
- EU-200 test lead set with
  2 test leads,
  2 test probes 4 mm,
  2 crocodile clips CAT III/1000 V
- Hard carrying case

Scope of supply:

1 x 15XP-B
1 x ACD-6 PRO
1 x TPP1-C1
1 x EU-200
1 x Hard carrying case

Ordering Information:

Description	Order No.
AMPRB-EU01	**3346066**

AMPRB-EU02
Professional kit

Contents
- 34XR-A (TRMS multimeter)
- ACDC-100 TRMS (digital AC/DC current clamp)
- IR608A infrared thermometer
- EU-200 test lead set with
  2 leads,
  2 test probes (4 mm),
  2 crocodile clips (CAT III/1000 V)
- Hard carrying case

Scope of supply:

1 x 34XR-A
1 x ACDC-100 TRMS
1 x IR608A
1 x EU-200
1 x Hard carrying case

Ordering Information:

Description	Order No.
AMPRB-EU02	**3346075**

Model	AD40B	ACD-10 PLUS	AC75B	ACD-6 PRO	ACD-14 PLUS	ACD-14 TRMS-PLUS	ACD-15 TRMS-PRO	ACD-16 TRMS-PRO	ACD-20SW	AC68C
Page	23	23	24	24	25	25	26	26	27	27
Max. current	400 A	600 A	600 A	1000 A	600 A	600 A	2000 A	1000 A	400 A	600 A
Type of current	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC/DC
True RMS measurement						•	•	•		•
Display	3¾-digit, 3999 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 6000 Digits	3¾-digit, 6000 Digits	3¾-digit, 3999 Digits	3¾-digit, 3999 Digits
AC current	0,01 A... 400 A	0,01 A...600 A	0,1 A...600 A	0,1 A...1000 A	0,01 A... 600 A	0,01 A... 600 A	0,1 A... 2000 A	0,01 A... 1000 A	0,01 A... 400 A	0,1 A…600 A
Basic accuracy*	1,5% + 10 Digit	1,5% + 8 Digit	1,9% + 5 Digit	1,5% + 5 Digit	1,9% + 8 Digit	1,9% + 8 Digit	1,5% + 5 Digit	1,0% + 5 Digit	2% + 6 Digit	2 % + 5 Digit
Frequency range	50...400 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50..500 Hz	50/60 Hz	40…450 Hz
DC current										0,1 A…600 A
Basic accuracy*										2 % + 5 Digit
AC voltage		0,001 V…600 V	0,001 V…750 V	1,0 mV... 600 V	0,001 V... 600 V	0,001 V... 600 V	0,001 V... 600 V	0,1 V... 600 V	1 mV... 600 V	0,1 V…600 V
Basic accuracy*		1,5% + 5 Digit	1,5% + 5 Digit	1,7% + 3 Digit	1,5% + 5 Digit	1,5% + 5 Digit	1,5% + 5 Digit	1,0% + 5 Digit	1,2% + 5 Digit	1,2 % + 10 Digit
Frequency range		50…500 Hz	50...500 Hz	50...400 Hz	50...400 Hz	50...400 Hz	50...500 Hz	50...500 Hz	50...500 Hz	40…450 Hz
DC voltage		0,1 mV…600 V	0,001 V…1000 V	0,001 V... 600 V	0,1 V... 600 V	0,1 V... 600 V	0,001 V... 600 V	0,1 V... 600 V	0,1 mV... 600 V	0,1 V…600 V
Basic accuracy*		0,5% + 3 Digit	0,9 % + 2 Digit	2,0% + 3 Digit	0,5 % + 3 Digit	0,5 % + 3 Digit	1 % + 5 Digit	0,5 % + 5 Digit	0,5 % + 2 Digit	0,75 % + 2 Digit
Resistance		0,1Ω... 40,00 MΩ	0,1 Ω...40,00 Ω	0,1Ω... 40,00 MΩ	0,1 Ω... 40,00 MΩ	0,1Ω... 40,00 MΩ	0,001 kΩ... 6,000 MΩ	0,1 Ω...999,9 Ω	0,1 Ω...40 MΩ	1 Ω…4 kΩ
Basic accuracy*		1,0% + 4 Digit	1,0 % + 2 Digit	1,0% + 4 Digit	0,8% + 6 Digit	0,8% + 6 Digit	1,0% + 4 Digit	1,0% + 6 Digit	1% + 4 Digit	1,0% + 5 Digit
Continuity test		R < 120 Ω	R < 200 Ω	R < 120 Ω	R < 120 Ω	R < 120 Ω	R < 300 Ω	R < 300 Ω	R < 25 Ω	R < 40 Ω
Frequency measurement		•			0,001Hz...100kHz	0,001Hz... 100kHz	1 Hz...30kHz	5,00Hz... 500,0 Hz		1 Hz...20 kHz
Power measurement										
Data Hold	•	•	•	•	•	•	•	•	•	•
MIN/MAX Hold		–/•			•	•	•	•		
Capacitance measurement		•	•		•	•	•			
Jaw opening	25 mm	25 mm	35 mm	45 mm	26 mm	26 mm	45 mm	45 mm	30 mm	40 mm
Power supply	2 x 1.5 V, IEC LR03	1 x 3 V, IEC-CR2032	1 x 9 V, IEC 6LR61	1 x 3V, IEC-CR2032	2 x 3 V, IEC-CR2032	2 x 3 V, IEC-CR2032	2 x 1.5 V, IEC LR03	2 x 1.5 V, IEC LR03	2 x 1.5 V, IEC LR03	1 x 9 V, IEC 6LR61
Auto power-off	•	•	•	•	•	•	•	•	•	
Measurement category	CATIII/600V	CATIII/600V	CATIII/600V CATII/1000V	CATIII/600V	CATIII/600V	CATIII/600V	CATIII/600V	CATIII/600V	CATIII/600V	CATIII/600V
Special features		Thin jaws, Inrush current measurement	A measurement range for direct measurement of ionisation currents in heating systems, Temperature measurement Backlight		2000 µA measurement range for direct measurement of ionisation currents in heating systems	2000 µA measurement range for direct measurement of ionisation currents in heating systems, True RMS measurement	Non contact voltage detection Backlight	Internal data logger for 5400 readings and RS-232 interface, Temperature measurement Backlight	Non contact voltage detection, 180° rotating head for perfect display	

* Basic accuracy refers to the best accuracy in the respective function

Current Clamps

Model	ACDC-100	ACDC-100 TRMS	ACDC-400	ACD-3300 IND	ACDC-3400 IND	ACD-45PQ	ACD-50NAV	ACD-53NAV	ACDC-54NAV	AC50A	LH41A
Page	28	28	28	29	29	30	30	31	31	32	32
Max. current	800 A AC/1000 A DC	800 A AC/1000 A DC	400 A	1000 A	1000 A	600 A	600 A	1000 A	1000 A	60 A	40 A
Type of current	AC/DC	AC/DC	AC/DC	AC	AC/DC	AC	AC	AC	AC/DC	AC	AC/DC
True RMS measurement		•		•	•	•	•	•	•		
Display	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 3999 Digits	3¾-digit, 6600 Digits	3¾-digit, 6600 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 4000 Digits	3¾-digit, 3999 Digits	4000 Digits
Current AC	0,1 A...800 A	0,1 A...800 A	0,01 A... 400 A	0,1 A…1000 A	0,1 A…1000 A	0.01…600 A	0.01…600 A	0.01…1000 A	0.01…1000 A	0,01 mA... 60 A	0,001 A...40 A
Basic accuracy*	1,5% + 5 Digit	1,5% + 5 Digit	1,5% + 3 Digit	2 % + 10 Digit	2 % + 10 Digit	0.5 % + 4 Digit	1.5 % + 4 Digit	1.5 % + 4 Digit	1.5 % + 4 Digit	1,5% + 5 Digit	1,3% + 5 Digit
Frequency range	40...200 Hz	40...200 Hz	50/60 Hz	50…1 kHz	50…1 kHz	50 Hz…3 kHz	50 Hz…400 Hz	50 Hz…400 Hz	50 Hz…400 Hz	40 Hz…1 kHz	40…400 Hz
Current DC	0,1 A...1000 A	0,1 A...1000 A	0,01 A...400 A		0,1 A…1000 A			0.01…1000 A	0.01…1000 A		0,001…40 A
Basic accuracy*	1,5% + 4 Digit	1,5% + 4 Digit	1,5% + 3 Digit		2 % + 5 Digit			1.5 % + 5 Digit	1.5 % + 5 Digit		1,3 % + 5 Digit
AC voltage	0,1 mV...600 V	0,1 mV...600 V	0,1 mV...600 V	0,1 mV…750 V	0,1 mV…750 V	0,1 mV…600 V	0,01…1000 V	0,01…1000 V	0,01…1000 V	0,1 V...400 V	
Basic accuracy*	1% + 4 Digit	1% + 4 Digit	1% + 3 Digit	1,5 % + 8 Digit	1,5 % + 8 Digit	0,5 % + 5 Digit	1 % + 5 Digit	1 % + 5 Digit	1 % + 5 Digit	2% + 4 Digit	
Frequency range	50...500 Hz	50...500 Hz	50...500 Hz	50 Hz…1 kHz	50 Hz…1 kHz	50 Hz…3 kHz	50…500 Hz	50…500 Hz	50…500 Hz	40 Hz...1 kHz	
DC voltage	0,1 mV...600 V	0,1 mV...600 V	0,1 mV...600 V	0,1 mV…1000 V	0,1 mV…1000 V	0,1 mV…600 V	0,01…1000 V	0,01…1000 V	0,01…1000 V		
Basic accuracy*	0,5 % + 3 Digit	0,5 % + 3 Digit	0,8 % + 2 Digit	0,5% + 2 Digit	0,5% + 2 Digit	0,5% + 5 Digit	0,7% + 2 Digit	0,7% + 2 Digit	0,7% + 2 Digit		
Resistance	0,1 Ω…40 MΩ	0,1 Ω…40 MΩ	0,1 Ω…40 MΩ	0,1 Ω…66,00 MΩ	0,1 Ω…66,00 MΩ	0,1…999.9 Ω	1 Ω…99.99 kΩ	1 Ω…99.99 kΩ	1 Ω…99.99 kΩ	0,1 Ω...400 Ω	
Basic accuracy*	0,8% + 6 Digit	0,8% + 6 Digit	1% + 3 Digit	1% + 5 Digit	1% + 5 Digit	1% + 6 Digit	1% + 3 Digit	1% + 3 Digit	1% + 3 Digit	1 % + 2 Digit	
Continuity test	R < 120 Ω	R < 120 Ω	R < 40 Ω	R < 30 Ω	R < 30 Ω	R < 300 Ω	R < 30 Ω	R < 30 Ω	R < 30 Ω	R < 40 Ω	
Frequency measurement				0,01 Hz…1000 MHz	0,01 Hz…1000 MHz	5…500 Hz	20 Hz…10 kHz	20 Hz…10 kHz	20 Hz…10 kHz		
Power measurement						•	•	•	•		
Data Hold	•	•	•	•	•	•	•	•	•	•	
MIN/MAX/PEAK Hold			•			•	•	•	•	•	
Capacitance measurement				0,001 nF…6,6 mF	0,001 nF…6,6 mF		0,01…4000 µF	0,01…4000 µF	0,01…4000 µF		
Jaw opening	50 mm	50 mm	30 mm	51 mm	51 mm	26 mm	37 mm	42 mm	42 mm	30 mm	19 mm
Power supply	2 x 1.5 V, IEC LR03	2 x 1.5 V, IEC R03	2 x 1.5 V, IEC R03	1 x 9 V, IEC 6F22	1 x 9 V, IEC 6F22	2 x 1.5 V, IEC LR03	1 x 9 V, IEC 6F22	1 x 9 V, IEC 6F22	1 x 9 V, IEC 6F22	2 x 1,5 V, IEC LR6	1 x 9 V, IEC 6LR61
Auto-Power-Off	•	•	•	•	•	•	•	•	•	•	•
Measurement category	CATIII/600V	CATIII/600V	CATIII/600V	CATIII/1000V, CATIV/600V	CATIII/1000V, CATIV/600V	CAT III / 600 V	CATIII/1000V, CATIV/600V	CATIII/1000V, CATIV/600V	CATIII/1000V, CATIV/600V	CATII/600V	CATII/600V
Special features	Measurement of inrush current	Measurement of inrush current, TRMS measurement Backlight	Backlight	Temperature Measurement Backlight	Relative Zero Backlight	TRMS measurement, Interface for Software connection, optional software "USB-KIT2"	Active power, Power factor, THD, harmonics 25th, Inrush current, Torch fuction	Active power, Power factor, THD, harmonics 25th, Inrush current, Torch fuction	Active power, Power factor, THD, harmonics 25th, Inrush current, Torch fuction	Leakage current clamp meter, minimum resolution 0.01 mA AC	Measurement of DC currents 1mA resolution

* Basic accuracy refers to the best accuracy in the respective function

Current Clamps (AC)

AMPROBE®

CAT III 600 V | 400 A AC | Data Hold | Bargraph

AD40B

Mini-current clamp up to 400 A (AC)

Functions
- Current measurement

Product information
- Automatic range selection
- Integrated measurement memory (data hold)
- Additional bar graph display
- Auto power-off
- Jaw opening: approx. 25 mm

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
Current AC:	0.01…400 A
Basic accuracy:	±(1.5% rdg. + 10 digits)
Frequency range for AC:	50…400 Hz
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	25 mm
Power supply:	2 x battery, 1.5 V, IEC LR03
Dimensions:	64 x 190 x 36 mm
Weight:	approx. 280 g

Scope of supply:

1 x AD40B
2 x 1.5 V battery, IEC LR03
1 x carrying case
1 x user manual

Accessories:

Carrying case **SV-U**

Ordering Information:

Description	Order No.
AD40B	**2727928**
SV-U	**2733511**

CAT III 600 V | 600 A AC | 600 V AC/DC | 0…40 MΩ | Data Hold | Hz | Peak Hold

ACD-10 PLUS

Current clamp up to 600 A AC

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Diode test
- Capacitance and frequency measurement
- Measurement of inrush current (30 ms)

Product information
- Automatic range selection
- Integrated measurement memory (data hold and MAX hold)
- Jaw opening: 25 mm
- Auto power-off

Product highlights
- Thin jaws

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.01…600 A
Basic accuracy:	±(1.5% rdg. + 8 digits)
Frequency range:	50/60 Hz
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…500 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 3 digits)
Continuity:	R < 120 Ω
Resistance:	(0.1…40.00 MΩ)
Basic accuracy:	±(1.0% rdg. + 4 digits)
Frequency measurement:	0.001 Hz…100 kHz
Capacitance measurement:	0.1 nF…3000 µF
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	25 mm
Power supply:	1 x 3 V battery, IEC CR2032
Dimensions:	190 x 63 x 32 mm
Weight:	approx. 150 g

Scope of supply:

1 x ACD-10 PLUS
2 x test leads
1 x 3 V battery, IEC CR2032
1 x carrying case
1 x user manual

Accessories:

Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-10 PLUS	**3037808**
SV-U	**2733511**
TL245A	**3034444**

Current Clamps (AC)

CAT III 600 V | 600 A AC | 750 V AC | 1000 V DC | µA | 0…40 MΩ | °C

AC75B
Current clamp up to 600 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Diode test
- Capacitance measurement
- Temperature measurement

Product information
- Automatic range selection
- Integrated measurement memory (data hold)
- Jaw opening: 35 mm
- Auto power-off

Product highlights
- A measurement range for direct measurement of ionisation currents in heating systems
- Backlight

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.1…600 A
Basic accuracy:	±(1.9% rdg. + 5 digits)
Frequency range:	50/60 Hz
Ionisation current AC/DC:	0.1…4000 µA
AC voltage:	0.001…750 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…500 Hz
DC voltage:	0.001…1000 V
Basic accuracy:	±(0.9% rdg. + 2 digits)
Continuity:	R < 200 Ω
Resistance:	0.1…40.00 MΩ
Basic accuracy:	±(1.0% rdg. + 2 digits)
Capacitance measurement:	0.001 nF…4.000 mF
Temperature measurement:	-40°C…400°C
Pollution degree:	2
Measurement category:	CAT III/600 V, CAT II/1000 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	35 mm
Power supply:	1 x battery, 9 V, IEC6LR61
Dimensions:	84 x 212 x 40 mm
Weight:	approx. 390 g

Scope of supply:
1 x AC75B
2 x test leads
1 x 9 V battery, IEC 6LR61
1 x carrying case
1 x user manual

Accessories:

Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
AC75B	**2727885**
SV-U	**2733511**
TL245A	**3034444**

CAT III 600 V | 1000 A AC | 600 V AC/DC | 0…40 MΩ | Data Hold | Auto/ Manuell Range

ACD-6 PRO
Current clamp up to 1000 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Diode test

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Relative measurement
- Jaw opening: 45 mm
- Auto power-off

Product highlights
- Large, easily readable LCD display
- Exceptional price/performance ratio

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.1…1000 A
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50/60 Hz
AC voltage:	1.0…600.0 V
Basic accuracy:	±(1.7% rdg. + 3 digits)
Frequency range:	50…400 Hz
DC voltage:	0.001…600.0 V
Basic accuracy:	±(2.0% rdg. + 3 digits)
Continuity:	R < 120 Ω
Resistance:	0.1…40.00 MΩ
Basic accuracy:	±(1% rdg. + 4 digits)
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	45 mm
Power supply:	1 x battery, 3 V, IEC CR2032
Dimensions:	224 x 78 x 40 mm
Weight:	approx. 200 g

Scope of supply:
1 x ACD-6 PRO
2 x test leads
1 x 3 V battery, CR 2032
1 x carrying case
1 x user manual

Accessories:

Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-6 PRO	**2730785**
SV-U	**2733511**
TL245A	**3034444**

CAT III 600 V | 400 A AC | 600 V AC/DC | 0…40 MΩ | Data Hold | °C | Hz | µA | Peak Hold

ACD-14 PLUS

Current clamp with dual display up to 600 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Capacitance and frequency measurement
- Temperature measurement
- Measurement of inrush current

Product information
- Automatic range selection
- Integrated measurement memory (data hold and MAX hold)
- Jaw opening: 26 mm
- Auto power-off

Product highlights
- Dual display
- A measurement range for direct measurement of ionisation currents in heating systems

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.01…600 A
Basic accuracy:	±(1.9% rdg. + 8 digits)
Frequency range:	50/60 Hz
Ionisation current AC/DC:	0.1…2000 µA
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…400 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 3 digits)
Continuity:	R < 120 Ω
Resistance:	0.1…40.00 MΩ
Basic accuracy:	±(0.8% rdg. + 6 digits)
Frequency measurement:	0.001 Hz…100 kHz
Capacitance measurement:	0.1 nF…3000 µF
Temperature:	-20°C…300°C
Basic accuracy:	±(2% rdg. + 3°C)
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	26 mm
Power supply:	2 x 3 V battery, IEC CR2032
Dimensions:	190 x 63 x 32 mm
Weight:	approx. 200 g

Scope of supply:

1 x ACD-14 PLUS
2 x test leads
2 x 3 V battery, CR 2032
1 x temperature probe
1 x carrying case
1 x user manual

Accessories:

Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-14 PLUS	**3086905**
SV-U	**2733511**
TL245A	**3034444**

CAT III 600 V | 400 A AC | 600 V AC/DC | 0…40 MΩ | Data Hold | °C | Hz | µA | True RMS | Peak Hold

ACD-14 TRMS-PLUS

True RMS current clamp with dual display up to 600 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Capacitance and frequency measurement
- Temperature measurement
- Measurement of inrush current

Product information
- Automatic range selection
- Integrated measurement memory (data hold and MAX hold)
- Jaw opening: 26 mm
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Dual display
- A measurement range for direct measurement of ionisation currents in heating systems

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.01…600 A
Basic accuracy:	±(1.9% rdg. + 8 digits)
Frequency range:	50/60 Hz
Ionisation current AC/DC:	0.1…2000 µA
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…400 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 3 digits)
Continuity:	R < 120 Ω
Resistance:	0.1…40.00 MΩ
Basic accuracy:	±(0.8% rdg. + 6 digits)
Frequency measurement:	0.001 Hz…100 kHz
Capacitance measurement:	0.1 nF…3000 µF
Temperature:	-20°C…300°C
Basic accuracy:	±(2% rdg. + 3°C)
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	26 mm
Power supply:	2 x 3 V battery, IEC CR2032
Dimensions:	190 x 63 x 32 mm
Weight:	approx. 200 g

Scope of supply:

1 x ACD-14 TRMS-PLUS
2 x test leads
2 x 3 V battery, CR 2032
1 x temperature probe
1 x carrying case
1 x user manual

Accessories:

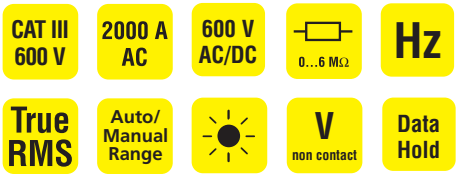
Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-14 TRMS-PLUS	**3086910**
SV-U	**2733511**
TL245A	**3034444**

Current Clamps (AC)



ACD-15 TRMS-PRO

Current clamp up to 2000 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Diode test
- Capacitance and frequency measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Jaw opening: 45 mm
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Non-contact voltage detection
- AutoTect™ function (automatic detection of current, voltage or resistance measurement)
- Backlight

Technical Data

Display:	LCD, 3¾-digit, 6000 digits
Measurement ranges	
Current AC:	0.1…2000 A
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50/60 Hz
AC voltage:	0.001…600 V
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	50…500 Hz
DC voltage:	0.001…600 V
Basic accuracy:	±(1% rdg. + 5 digits)
Continuity:	R < 300 Ω
Resistance:	0.001 kΩ…6.000 MΩ
Basic accuracy:	±(1.0% rdg. + 4 digits)
Frequency measurement:	10 Hz…1 kHz
Capacitance measurement:	0.1 nF…2000 µF
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	45 mm
Power supply:	2 x 1.5 V battery, AAA IEC LR03
Dimensions:	224 x 78 x 40 mm
Weight:	approx. 220 g

Scope of supply:

1 x ACD-15 TRMS-PRO
2 x test leads
2 x 1.5 V battery, IEC LR03
1 x carrying case
1 x user manual

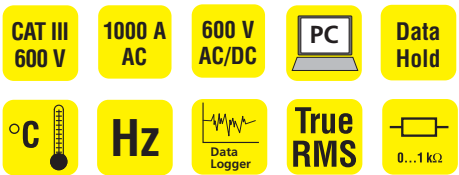
Accessories:

Carrying case **SV-U**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-15 TRMS-PRO	**2730690**
SV-U	**2733511**
TL245A	**3034444**



ACD-16 TRMS-PRO

True RMS current clamp with data logger up to 1000 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Frequency measurement
- Temperature measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Jaw opening: 45 mm
- Auto power-off

Product highlights
- True RMS measurement (TRMS)
- Internal data logger for 5400 readings and RS-232 interface
- Backlight

Technical Data

Display:	LCD, 3¾-digit, 6000 digits
Measurement ranges	
Current AC:	0.01…1000 A
Basic accuracy:	±(1.0% rdg. + 5 digits)
Frequency range:	50…500 Hz
AC voltage:	0.1…600 V
Basic accuracy:	±(1.0% rdg. + 5 digits)
Frequency range:	50…500 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 5 digits)
Continuity:	R < 300 Ω
Resistance:	0.1…999.9 Ω
Basic accuracy:	±(1.0% rdg. + 6 digits)
Frequency measurement:	5.00…500.0 Hz
Temperature measurement:	-50°C…300°C
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	45 mm
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	224 x 78 x 40 mm
Weight:	approx. 220 g

Scope of supply:

1 x ACD-16 TRMS-PRO
2 x test leads
2 x 1.5 V battery, IEC LR03
1 x temperature probe
1 x carrying case
1 x user manual

Accessories:

PC software and USB cable **USB-KIT2**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-16 TRMS-PRO	**2730713**
USB-KIT2	**3804929**
TL245A	**3034444**

Current Clamps (AC) or (AC/DC)

AMPROBE®

CAT III 600 V | 400 A AC | 600 V AC/DC | 0...40 MΩ | Data Hold

ACD-20SW

Swivel Clamp Meter up to 400 A (AC)

Functions
- Measures current, voltage and resistance
- Audible continuity test
- Diode test

Product information
- Auto and manual ranging
- Measured data storage (Data Hold)
- Accomodates conductors up to 30 mm in diameter
- Auto-Power-Off

Product highlights
- 180 degree rotating head for the perfect display
- Advanced VoltTect non-contact voltage detection

Technical Data

Display	LCD, 3¾ digit, maximum reading 3999 digits
Current AC	0,01...400 A
Basic accuracy	± (2% rdg + 6 dgts)
Frequency Range	50...60 Hz
Voltage AC	1,0 mV...600,0 V
Basic accuracy	± (1,2% rdg + 5 dgts)
Frequency Range	50...500 Hz
Voltage DC	0,1 mV...600 V
Basic accuracy	± (0,5% rdg + 2 dgts)
Continuity	R < 25 Ω
Resistance	0,1 Ω... 40 MΩ
Basic accuracy	± (1,0% rdg + 4 dgts)
Pollution Degree	2
Measurement Category	CAT III / 600 V
Safety cert.	DIN VDE 0411/EN 61010/ IEC 61010
Jaw Opening	30 mm
Power Supply	2 x battery 1,5 V (IEC LR03)
Dimensions	240 × 70 × 41 mm
Weight	approx. 220 g

Scope of supply:

1 pc. ACD-20SW
1 pc. Carrying Case
1 pc. Test lead set
2 pc. Battery 1,5 V, IEC LR03
1 pc. Manual

Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-20SW	**3472723**
TL245A	**3034444**

CAT III 600 V | 600 A AC/DC | 600 V AC/DC | 1Ω...4kΩ | Hz | Max Hold | Data Hold | True RMS

AC68C

Current clamp TRMS up to 600 A (AC/DC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Frequency measurement
- Peak value measurement

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Jaw opening: 40 mm

Product highlights
- AC/DC clamps are also suitable for automotive applications, emergency power supplies and solar technology.
- True RMS measurement (TRMS)

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
Current AC:	0.1…600 A
Basic accuracy:	±(2% rdg. + 5 digits)
Frequency range:	40…450 Hz
Current DC:	0.1…600 A
Basic accuracy:	±(2% rdg. + 5 digits)
AC voltage:	0.1…600 V
Basic accuracy:	±(1.2% rdg. + 10 digits)
Frequency range:	40…450 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.75% rdg. + 2 digits)
Continuity:	R < 40 Ω
Resistance:	1 Ω…4 kΩ
Basic accuracy:	±(1% rdg. + 5 digits)
Frequency measurement:	1 Hz…20.00 kHz
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	40 mm
Power supply:	1x 9 V battery, IEC 6F22
Dimensions:	76 x 228 x 39 mm
Weight:	approx. 465 g

Scope of supply:

1 x AC68C
2 x test leads
1 x 9 V battery, IEC 6F22
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
AC68C	**2727919**
TL245A	**3034444**

Current Clamps (AC/DC)

CAT III 600 V | 800 A AC | 1000 A DC | 600 V AC/DC | 0…40 MΩ

Data Hold | Auto/ Manual Range | True RMS

ACDC-100

Current clamp up to 800 A (AC) / 1000 A (DC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Measurement of inrush current (30 ms)

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold)
- Jaw opening: 50 mm
- Auto power-off

Product highlights
- Large, clear display

ACDC-100 TRMS

TRMS current clamp up to 800 A (AC) / 1000 A (DC)

Similar as ACDC-100 but with:
- True RMS measurement (TRMS)
- Backlight

Technical Data

Display:	LCD, 3¾-digit, 4000 digits
Measurement ranges	
Current AC:	0.1…800 A
Basic accuracy:	±(1.5% rdg. + 5 digits)
Frequency range:	40…200 Hz
Current DC:	0.1…1000 A
Basic accuracy:	±(1.5% rdg. + 4 digits)
AC voltage:	0.1 mV…600 V
Basic accuracy:	±(1% rdg. + 4 digits)
Frequency range:	50…500 Hz
DC voltage:	0.1…600 V
Basic accuracy:	±(0.5% rdg. + 3 digits)
Continuity:	R < 120 Ω
Resistance:	0.1…40.00 MΩ
Basic accuracy:	±(0.8% rdg. + 6 digits)
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	50 mm
Power supply:	2 x 1.5 V battery, IEC LR03
Dimensions:	227 x 78 x 40 mm
Weight:	approx. 290 g

Scope of supply:

1 x ACDC-100 or ACDC-100 TRMS
2 x test leads
1 x 1.5 V battery, IEC LR03
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACDC-100	**2740452**
ACDC-100 TRMS	**2740465**
TL245A	**3034444**

CAT III 600 V | 400 A AC/DC | 600 V AC/DC | 0…40 MΩ

Bargraph | Auto/ Manual Range | Data Hold | min / max

ACDC-400

Current clamp up to 400 A (AC/DC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold, MIN/MAX)
- Relative measurement
- Additional bar graph display
- Jaw opening: 30 mm
- Auto power-off

Product highlights
- AC/DC clamps are also suitable for automotive applications, emergency power supplies and solar technology.
- Backlight

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
Current AC:	0.01 A... 400 A
Basic accuracy:	± (1,5% rdg. + 3 digits)
Frequency range:	50/60 Hz
Current DC:	0.01 A... 400 A
Basic accuracy:	± (1.5% rdg. + 3 digits)
AC voltage:	0.1 mV...600 V
Basic accuracy:	± (1% rdg. + 3 digits)
Frequency range:	50...500 Hz
DC voltage:	0.1 mV...600 V
Basic accuracy:	± (0.8 % rdg. + 2 digits)
Continuity:	R < 40 Ω
Resistance:	0.1 Ω... 40 MΩ
Basic accuracy:	± (1% rdg. + 3 digits)
Pollution degree:	2
Measurement category:	CAT III / 600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	30 mm
Power supply:	2 x Battery 1,5 V, IEC LR03
Dimensions:	205 x 64 x 39 mm
Weight:	approx. 280 g

Scope of supply:

1 x ACDC-400
2 x test leads
2 x 1.5 V battery, IEC LR03
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACDC-400	**2730810**
TL245A	**3034444**

Current Clamps (AC/DC)

AMPROBE®

CAT IV 600 V | 1000 A AC | 750 V AC & 1000 V DC | 0...60 MΩ | ⊣⊢ | Peak Hold | °C | Hz | ☀ | True RMS

ACD-3300 IND

CAT IV Industrial True RMS Clamp Meter up to 1000 A (AC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Frequency measurement
- Peak value measurement
- Temperature measurement
- Duty Cycle

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold, peak hold)
- Bargraph
- Backlight
- Auto Power Off
- Relative Zero
- Jaw opening: 51 mm

Product highlights
- True RMS measurement (TRMS)

Technical Data

Display:	LCD, 3¾-digit, 6600 digits
Measurement ranges	
Current AC:	0.1…1000 A
Basic accuracy:	±(2% rdg. + 10 digits)
Frequency range:	50 Hz…1 kHz
AC voltage:	0.1mV…750 V
Basic accuracy:	±(1.5% rdg. + 8 digits)
Frequency range:	50 Hz…1 kHz
DC voltage:	0.1mV…1000 V
Basic accuracy:	±(0.5% rdg. + 2 digits)
Continuity:	R < 30 Ω
Resistance:	0.1 Ω…66.00 MΩ
Basic accuracy:	±(1% rdg. + 5 digits)
Frequency measurement:	0.01 Hz…1.000 MHz
Capacitance:	0,001nF…6.6 mF
Duty Cycle:	5.0 %…95.0 %
Temperature measurement:	-35.0°C…1000°C
Pollution degree:	2
Measurement category:	CAT III 1000V, CAT IV 600V,
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	51 mm
Power supply:	1 x 9 V battery, IEC 6F22
Dimensions:	283 x 105 x 50 mm
Weight:	approx. 560g

Scope of supply:

1 x ACD-3300 IND
2 x test leads
1x 9 V battery, IEC 6F22
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL35B**

Ordering Information:

Description	Order No.
ACD-3300 IND	**3434877**
TL35B	**3068232**

CAT IV 600 V | 1000 A AC/DC | 750 V AC & 1000 V DC | 0...60 MΩ | ⊣⊢ | Peak Hold | Hz | ☀ | True RMS

ACDC-3400 IND

CAT IV Industrial True RMS Clamp Meter up to 1000 A (AC/DC)

Functions
- Current, voltage and resistance measurement
- Continuity test with beeper
- Frequency measurement
- Peak value measurement
- Duty Cycle

Product information
- Automatic and manual range selection
- Integrated measurement memory (data hold, peak hold)
- Bargraph
- Backlight
- Auto Power Off
- Relative Zero
- Jaw opening: 51 mm

Product highlights
- True RMS measurement (TRMS)

Technical Data

Display:	LCD, 3¾-digit, 6600 digits
Measurement ranges	
Current AC:	0.1…1000 A
Basic accuracy:	±(2% rdg. + 10 digits)
Frequency range:	50 Hz…1 kHz
Current DC:	0.1…1000 A
Basic accuracy:	±(2% rdg. + 5 digits)
AC voltage:	0.1mV…750 V
Basic accuracy:	±(1.5% rdg. + 8 digits)
Frequency range:	50 Hz…1 kHz
DC voltage:	0.1mV…1000 V
Basic accuracy:	±(0.5% rdg. + 2 digits)
Continuity:	R < 30 Ω
Resistance:	0.1 Ω…66.00 MΩ
Basic accuracy:	±(1% rdg. + 5 digits)
Frequency measurement:	0.01 Hz…1.000 MHz
Capacitance:	0.001nF...6.6 mF
Duty Cycle:	5.0 %…95.0 %
Pollution degree:	2
Measurement category:	CAT III 1000V, CAT IV 600V,
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	51 mm
Power supply:	1 x 9 V battery, IEC 6F22
Dimensions:	283 x 105 x 50 mm
Weight:	approx. 560g

Scope of supply:

1 x ACDC-3400 IND
2 x test leads
1 x 9 V battery, IEC 6F22
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL35B**

Ordering Information:

Description	Order No.
ACD-3400 IND	**3434889**
TL35B	**3068232**

Power Quality Clamp Meters (AC)

NEW

CAT III 600 V | 600 A AC | 600 V AC/DC | Optional Software | PC | Data Hold | 0…999.9 Ω | Hz | True RMS

ACD-45PQ

Digital power clamp meter 600 A (AC) TRMS

Functions
- Current, voltage and resistance measurement
- Measurement of apparent, reactive and active power
- Measurement of the power factor cos φ
- Acoustic continuity test
- Frequency measurement
- Peak value measurement

Product Information
- AutoVA - Automatic selection of AC voltage, DC voltage or AC current
- Measurement in asymmetrical three-phase systems
- Calculation of the individual load powers
- Automatic measuring range selection
- Integrated measurement memory (Data Hold)
- Large clear display with background light
- Clamp opening 26 mm
- Auto-Power-Off

Product Highlights
- True RMS measurement (TRMS)
- Interface for software connection
- Software optional (USB-KIT2)

Technical Data

Display	LCD, 3¾-digit, 4000 digits
Measuring ranges	
Current AC	0.01…600 A
Basic accuracy	± (0.5 % rdg. + 4 digits)
Frequency range	50 Hz…3 kHz
Voltage AC	0.1…600 V
Basic accuracy	± (0.5 % rdg. + 5 digits)
Frequency range	50 Hz…3 kHz
Voltage DC	0.1…600 V
Basic accuracy	± (0.5 % rdg. + 5 digits)
Active power	0…360.0 kW
Apparent power	0…360.0 kVA
Reactive power	0…360.0 kvar
cos φ	0.10…0.99
Resistance	0.1 Ω…999.9 Ω
Basic accuracy	± (1 % rdg. + 6 digits)
Continuity	R < 300 Ω
Frequency measurement	5.00 Hz…500.0 Hz
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	DIN VDE 0411/EN 61010/ IEC 61010
Clamp opening	26 mm
Power supply	2 x batteries 1.5 V, IEC LR03
Dimensions	227 x 78 x 32 mm
Weight	approx. 225 g

Scope of supply:

1 x ACD-45PQ
2 x test leads
2 x batteries 1.5 V, IEC LR03
1 x carrying case
1 x user manual

Accessories:

PC software and USB cable **USB-KIT2**

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-45PQ	**3730013**
USB-KIT2	**3804929**
TL245A	**3034444**

NEW

CAT IV 600 V | 600 A AC | 1000 V AC/DC | 1Ω…99kΩ | Data Hold | min / max | Bargraph | L3 L1 L2

ACD-50NAV

Power clamp meter 600 A (AC) TRMS with joystick

Functions
- Current, voltage and resistance measurement
- Measurement of active power (W)
- Measurement of the power factor cos φ
- Acoustic continuity test
- Capacity and frequency measurement
- Harmonics measurement for current and voltage values (up to the 25th harmonic)
- THD measurement
- Measurement of the inrush current
- Display of the rotary field direction

Product Information
- Automatic measuring range selection
- Integrated measurement memory (Data Hold, MIN/MAX)
- Additional bargraph display
- Peak value measurement
- Low Pass frequency filter
- Large clear display with background light
- Clamp opening 37 mm
- Auto-Power-Off

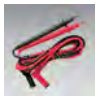
Product Highlights
- True RMS measurement AC+DC (TRMS)
- Non contact voltage detection
- Torch function via white LED
- Joystick for easy function selection

Technical Data

Display	LCD, 3¾-digit, 4000 digits
Measuring ranges	
Current AC	0.01…600 A
Basic accuracy	± (1.5 % rdg. + 5 digits)
Frequency range	50 Hz…400 Hz
Voltage AC	0.01…1000 V
Basic accuracy	± (1 % rdg. + 5 digits)
Frequency range	50 Hz…500 Hz
Voltage DC	0.01…1000 V
Basic accuracy	± (0.7 % rdg. + 2 digits)
Active power	0…600.0 kW
cos φ	-1.00–0.00…+1.00
Harmonics display	up…the 25th
THD	0.1…100%
Resistance	1Ω…99.99 kΩ
Basic accuracy	± (1 % rdg. + 3 digits)
Continuity	R < 30 Ω
Frequency measurement	20.00…9.999 kHz
Capacitance	0.01…4000 µF
Pollution degree:	2
Measurement category:	CAT IV 600V /CAT III 1000V
Safety cert.:	DIN VDE 0411/EN 61010/ IEC 61010
Clamp opening	37 mm
Power supply	1 x battery 9 V, IEC 6F22
Dimensions	approx. 260 x 80 x 40 mm
Weight	approx. 480 g

Scope of supply:

1 x ACD-50NAV
2 x test leads
1 x battery 9 V, IEC 6F22
1 x carrying case
1 x user manual



Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
ACD-50NAV	**3729945**
TL245A	**3034444**

Power Quality Clamp Meters (AC) and (AC/DC)

AMPROBE®

NEW

ACD-53NAV

Power clamp meter 1000 A (AC) TRMS with joystick

CAT IV 600 V | 1000 A AC | 1000 V AC/DC | 1Ω...99kΩ | Data Hold | min/max | Bargraph

Functions
- Current, voltage and resistance measurement
- Measurement of active power (W)
- Measurement of the power factor cos φ
- Acoustic continuity test
- Capacity and frequency measurement
- Harmonics measurement for current and voltage values (up to the 25th harmonic)
- THD measurement
- Measurement of the inrush current
- Display of the rotary field direction

Product Information
- Automatic measuring range selection
- Integrated measurement memory (Data Hold, MIN/MAX)
- Additional bargraph display
- Peak value measurement
- Low Pass frequency filter
- Large clear display with background light
- Clamp opening 42 mm
- Auto-Power-Off

Product Highlights
- True RMS measurement AC+DC (TRMS)
- Non contact voltage detection
- Torch function via white LED
- Joystick for easy function selection

Scope of supply:

1 x ACD-53NAV
2 x test leads
1 x battery 9 V, IEC 6F22
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Technical Data

Display	3¾-digit, 4000 digits
Measuring ranges	
Current AC	0.01…1000 A
Basic accuracy	± (1.5 % rdg. + 5 digits)
Frequency range	50 Hz…400 Hz
Voltage AC	0.01…1000 V
Basic accuracy	± (1 % rdg. + 5 digits)
Frequency range	50 Hz…500 Hz
Voltage DC	0.01…1000 V
Basic accuracy	± (0.7 % rdg. + 2 digits)
Active power	0…999.9 kW
cos φ	-1.00…0.00…+1.00
Harmonics display	up to the 25th
THD	0.1…100%
Resistance	1 Ω…99.99 kΩ
Basic accuracy	± (1 % rdg. + 3 digits)
Continuity	R < 30 Ω
Frequency measurement	20.00…9.999 kHz
Capacitance	0.01…4000 µF
Pollution degree:	2
Measurement category	CAT IV 600V /CAT III 1000V
Safety cert.	DIN VDE 0411/EN 61010/ IEC 61010
Clamp opening	42 mm
Power supply	1 x battery 9 V, IEC 6F22
Dimensions	approx. 260 x 80 x 40 mm
Weight	approx. 480 g

Ordering Information:

Description	Order No.
ACD-53NAV	**3729977**
TL245A	**3034444**

NEW

ACDC-54NAV

Power clamp meter 1000 A (AC/DC) TRMS with joystick

CAT IV 600 V | 1000 A AC/DC | 1000 V AC/DC | 1Ω...99kΩ | Data Hold | min/max | Bargraph

Functions
- Current, voltage and resistance measurement
- Measurement of active power (W)
- Measurement of the power factor cos φ
- Acoustic continuity test
- Capacity and frequency measurement
- Temperature measurement
- Harmonics measurement for current and voltage values (up to the 25th harmonic)
- THD measurement
- Measurement of the inrush current
- Display of the rotary field direction

Product Information
- Automatic measuring range selection
- Integrated measurement memory (Data Hold, MIN/MAX)
- Additional bargraph display
- Peak value measurement
- Low Pass frequency filter
- Large clear display with background light
- Clamp opening 42 mm
- Auto-Power-Off

Product Highlights
- True RMS measurement AC+DC (TRMS)
- Non contact voltage detection
- Torch function via white LED
- Joystick for easy function selection

Scope of supply:

1 x ACDC-54NAV
2 x test leads
1 x flexible temperature sensor
1 x battery 9 V, IEC 6F22
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Technical Data

Display	LCD, 3¾-digit, 4000 digits
Measuring ranges	
Current AC	0.01…1000 A
Basic accuracy	± (1.5 % rdg. + 5 digits)
Frequency range	50 Hz…400 Hz
Current DC	0.01…1000 A
Basic accuracy	± (1.5 % rdg. +5 digits)
Voltage AC	0.01…1000 V
Basic accuracy	± (1 % rdg. + 5 digits)
Frequency range	50 Hz…500 Hz
Voltage DC	0.01…1000 V
Basic accuracy	± (0.7 % rdg. + 2 digits)
Active power	0…999.9 kW
cos φ	-1.00…0.00…+1.00
Harmonics display	up to the 25th
THD	0.1…100 %
Resistance	1Ω…99.99 kΩ
Basic accuracy	± (1 % rdg. + 3 digits)
Continuity	R < 30 Ω
Frequency measurement	20.00…9.999 kHz
Capacitance	0.01…4000 µF
Temperature measurement	-50 °C…1000 °C
Pollution degree:	2
Measurement category:	CAT IV/600V, CAT III/1000V
Safety cert.:	DIN VDE 0411, EN 61010, IEC 61010
Clamp opening	42 mm
Power supply	1 x battery 9 V, IEC 6F22
Dimensions	approx. 260 x 80 x 40 mm
Weight	approx. 480 g

Ordering Information:

Description	Order No.
ACDC-54NAV	**3729989**
TL245A	**3034444**

Leakage Clamp Meter

CAT II 600 V | 60 A AC | Resolution 10 µA AC | 400 V AC | Data Hold

AC50A
Leakage current clamp (AC)

Functions
- Leakage current measurement
- Voltage and resistance measurement
- Continuity test with beeper

Product information
- Manual range selection
- Integrated measurement memory (data hold)
- MIN/MAX and relative value measurement
- Additional bar graph display
- Jaw opening: 30 mm
- Auto power-off

Product highlights
- Minimum resolution: 0.01 mA
- Range of applications: measurement of leakage or fault currents, current consumption of devices in service sector without open the circuit

Technical Data

Display:	LCD, 3¾-digit, 3999 digits
Measurement ranges	
Current AC:	0.01 mA…60 A
Tolerance:	±(1.5% rdg. + 5 digits)
AC voltage:	0.1…400 V
Tolerance:	±(2% rdg. + 4 digits)
Frequency range for AC current/voltage:	40 Hz…1 kHz
Input resistance:	10 MΩ
Tolerance:	
Resistance:	0.1…400 Ω
Tolerance:	±(1% rdg. + 2 digits)
Continuity:	R < 40 Ω
Pollution degree:	2
Measurement category:	CAT II/600 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	30 mm
Power supply:	2 x 1.5 V battery, IEC LR6
Dimensions:	210 x 62 x 36 mm
Weight:	approx. 200 g

Scope of supply:

1 x AC50A
2 x test leads
2 x 1.5 V battery, IEC LR6
1 x carrying case
1 x user manual

Accessories:

Test lead set **TL245A**

Ordering Information:

Description	Order No.
AC50A	**3033017**
TL245A	**3034444**

CAT III 300 V | 40 A AC/DC | Resolution 0,001 A AC/DC | Data Hold

LH41A
Current clamp (AC/DC)

Functions
- Current measurement from 1 mA AC and DC

Product information
- Manual range selection
- Jaw opening: 19 mm
- Automatic zero-point (DC measurement range)
- Integrated 5 s measurement memory (data hold)
- Auto power-off

Product highlights
- Minimum resolution: 1 mA
- Shielded against external interference

Technical Data

Display:	LCD, 4000 digits
Measurement ranges	
Current AC/DC:	0.001…40 A
Basic accuracy:	±(1.3% rdg. + 5 digits)
Frequency range:	40…400 Hz
Pollution degree:	2
Measurement category:	CAT III/300 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	19 mm
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	184 x 71 x 31 mm
Weight:	approx. 235 g

Scope of supply:

1 x LH41A
1 x 9 V battery, IEC 6LR61
1 x user manual

Ordering Information:

Description	Order No.
LH41A	**3030898**

Current clamp adapter

AMPROBE®

CAT III 300 V | 200 A AC | Output Analog

A-300
Current clamp adapter (AC)

Functions
- Clamp adapter for extending the AC ranges of multimeters up to 200 A

Product information
- Output voltage: 1 mV/mA; 100 mV/A; 5 mV/A
- Jaw opening: 15 mm
- Detachable test leads
- No batteries required

Technical Data

Measurement ranges	
Current AC	1 A, 10 A, 200 A
Basic accuracy:	±(3 %)
Frequency range:	40 Hz…5 kHz
Output voltage	1 mV/mA; 100 mV/A; 5 mV/A
Measurement category:	CAT III/300 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	15 mm
Dimensions:	ca. 116 x 46 x 23 mm
Weight:	approx. 165 g

Scope of supply:

1 x A-300
1 x user manual

Ordering Information:

Description	Order No.
A-300	**2744335**

CAT III 600 V | 3000 A AC | Output Analog

ACF-3000AK
Flexible current transducer (AC)

Functions
- Flexible current transducer for extending the AC ranges of multimeters up to 3000 A

Product information
- Can be used with all common multimeters (mV measurement range)
- 4 mm connection
- Measurements also possible in small, compact systems with limited space without the need to disconnect cables
- Separate electronic unit for accurate measurements
- Transducer diameter: 178 mm

Product highlights
- Suitable for measuring cables and busbars that are difficult to access, as the flexible transformer can be placed around the object to be measured.
- Current measurement up to 3000 A AC

Technical Data

Measurement ranges	
Current AC:	30 A, 300 A, 3000 A
Basic accuracy:	±(1.0% rdg.)
Output voltage:	100 mV, 10 mV, 1 mV/A
AC frequency range:	10 Hz…20 kHz
Pollution degree:	2
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010/IEC 61010
Transducer diameter:	210 mm (178 mm internal)
Power supply:	2 x 1.5 V battery, IEC LR6
Weight:	approx. 180 g

Scope of supply:

1 x ACF-3000AK
1 x connecting cable (2 m)
2 x 1.5 V battery, IEC LR06
1 x user manual

Ordering Information:

Description	Order No.
ACF-3000AK	**2732388**

Current clamp adapter

CAT III 300 V | 1000 A AC/DC | Output Analog

CT235A
Current clamp adapter (AC/DC)

Functions
- Clamp adapter for extending the AC and DC ranges of multimeters up to 1000 A AC/DC

Product information
- Can be used with all common multimeters; also compatible with TRUE RMS multimeters and analogue recorders
- Output signal: 1 mV corresponds to 1 A test current
- Jaw opening: 32 mm
- Fixed test leads
- Zero adjustment

Technical Data

Measurement ranges	
Current AC/DC:	200 A, 1000 A
Basic accuracy:	±(1% + 0.5 A)
Output voltage:	1 mV/A
AC frequency range:	50 Hz…10 kHz
Pollution degree:	2
Measurement category:	CAT III/300 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	32 mm
Cable Length	approx. 1.5 m
Power supply:	1 x 9 V battery, IEC 6F22
Dimensions:	approx. 195 x 70 x 30 mm
Weight:	approx. 300 g

Scope of supply:

1 x CT235A
1 x 9 V battery, IEC 6F22

Ordering Information:

Description	Order No.
CT235A	**3026809**

CAT III 300 V | 200 A AC/DC | Output Analog

CT237B
Current clamp adapter (AC/DC)

Functions
- Clamp adapter for extending the AC and DC ranges of multimeters up to 200 A AC/DC

Product information
- Can be used with all common multimeters; also compatible with TRUE RMS multimeters and analogue recorders
- Output signal: 10 mV corresponds to 1 A test current
- Jaw opening: 20 mm
- Fixed test leads
- Zero adjustment

Technical Data

Measurement ranges	
Current AC/DC:	20 A, 200 A
Basic accuracy:	±(1,2% + 0.03 A)
Output voltage:	10 mV/A (20 A measurement range) 1 mV/A (200 A measurement range)
AC frequency range:	50 Hz…1 kHz
Pollution degree:	2
Measurement category:	CAT III/300 V
Safety cert.:	EN 61010/IEC 61010
Jaw opening:	20 mm
Cable Length	approx. 1.5 m
Power supply:	1 x 9 V battery, IEC 6F22
Dimensions:	approx. 185 x 70 x 30 mm
Weight:	approx. 280 g

Scope of supply:

1 x CT237B
1 x 9 V battery, IEC 6F22

Ordering Information:

Description	Order No.
CT237B	**3511514**

TELARIS® 0100-PLUS

Multifunction installation tester

Functions

- Loop resistance measurement up to 265 V
- Measurement of internal line resistance up to 440 V
- Measurement of short circuit current
- RCD measurement (contact voltage, trip time, trip current — with ramp current)
- Low ohm measurement
- Insulation measurement with 100, 250, 500 V
- Voltage and frequency measurement
- Phase rotation test

Product information

- Memory for 500 readings
- IR/RS-232 interface for transferring stored measurements to a PC
- Optional software available
- Integrated socket test with contact electrode for identification of incorrectly connected sockets or missing protective earth
- Large, clear display to enable easy reading of measured values and units
- Auto power-off

Product highlights

- Measurement of loop resistance and short circuit current without tripping RCD

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement range/resolution	
Voltage:	1…440 V/1 V AC/DC
Frequency:	10…99.9 Hz/0.1 Hz
Loop resistance:	0.15…19.99/199.9/1999 Ω 0.01/0.1/1 Ω
Short circuit current:	0.10 A…1.7 kA/0.01 A…0.1 kA
Input voltage range:	195…264 V 50/60 Hz
Test current:	approx. 4.6 A (at 230 V)
Internal line resistance:	0.15…19.99/199.9/1999 Ω, 0.01/0.1/1 Ω
Short circuit current:	0.10 A…2.7 kA/0.01 A…0.1 kA
Input voltage range:	195…440 V 50/60 Hz
Test current:	approx. 4.6 A (at 230 V)
Loop resistance without tripping RCD:	0.5…19.99/199.9/1999 Ω, 0.01/0.1/1 Ω
Short circuit current:	0.50 A…0.5 kA/0.01 A…0.1 kA
Input voltage range:	195…264 V 50/60 Hz
Test current:	approx. 5 mA (at 230 V)
Insulation resistance:	0.05…19.99/199.9 MΩ, 0.01/0.1 MΩ
Test voltage:	100, 250, 500 V DC
Low ohm measurement:	0.05…19.99/199.9/1999 Ω, 0.01/0.1/1 Ω
Test current:	> 200 mA DC
RCD nominal trip currents:	10, 30, 100, 300, 500 mA, 0.5 x 30 mA, 5 x 30 mA
Selective:	100, 300, 500 mA
Measurement functions:	contact voltage, trip time, trip current test with rising test current
Contact voltage:	1…63 V
Earth resistance:	10…1999 Ω/19.99 kΩ/1 Ω/0.01 kΩ
Trip time:	1…500 ms/1 ms
Trip current:	40…140% of $I_{\Delta N}$ (in 10% steps)
Phase rotation test	
Input voltage range:	100…440 V 50/60 Hz
Measurement memory:	approx. 500 readings
Interface:	IR/RS-232
Safety cert.:	EN61010, IEC61010, EN61557, IEC6155
Measurement category:	CAT III/440 V
Pollution degree:	2
Protection category:	IP 40
Power supply:	6 x 1.5 V battery, IEC LR6
Dimensions:	235 x 105 x 70 mm
Weight:	approx. 650 g

Scope of supply:

1 x TELARIS 0100-PLUS
1 x test lead with schuko plug
3 x test lead with safety plug
3 x crocodile clips
3 x test probes
1 x holster
1 x carrying case
6 x 1.5 V battery, IEC LR6
1 x user manual

Ordering Information:

Description	Order No.
TELARIS 0100-PLUS EUR	**3087130**
TELARIS 0100-PLUS UK	**3087166**
TELARIS 0100-PLUS CH	**3087153**

Installation testers

TELARIS® LOOP-TEST

Loop tester

Functions

- Measurement of loop resistance and short circuit current without tripping RCD
- Measurement of internal line resistance and short circuit current
- Separate analysis of individual conductor resistances: protective earth resistance, phase resistance and neutral resistance
- Voltage and frequency measurement

Product information

- Memory for 250 readings
- IR/RS-232 interface for transferring measurements to a PC
- Optional software available
- Integrated socket test with contact electrode for quick identification of incorrectly connected sockets or missing protective earth
- Preselection of max. contact voltage limit
- Large, clear display to enable easy reading of measured values and units
- Auto power-off

Product highlights

- Patented procedure for determining loop resistance and short circuit current without tripping of the RCD

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement range/resolution/tolerance	
Loop resistance:	0.05…1999 Ω/0.01…1 Ω/ ±(8% rdg. + 8 digits)
Line resistance:	0.05…19.99 Ω/0.01/ ±(6% rdg.+ 6 digits)
Neutral resistance:	0.05…19.99 Ω/0.01/ ±(6% rdg. + 8 digits)
Protective earth resistance:	0.05…1999 Ω/0.01…1 Ω/ ±(7% rdg. + 8 digits)
Phase resistance:	0.05…19.99 Ω/0.01/ ±(6% rdg. + 8 digits)
Short circuit current:	1 A…4.6 kA/1 A, 10 A
Voltage:	0…300 V/1 V/±(5% rdg. + 5 digits)
Mains frequency:	10…200 Hz/0.1 Hz/ ±(1% rdg. + 2 digits)
Contact voltage:	25 V/50 V (switchable)
Measurement memory:	approx. 250 readings
Interface:	IR/RS-232
Safety cert.:	EN 61010, IEC 61010; EN 61557, IEC 61557
Measurement category:	CAT III/300 V
Pollution degree:	2
Protection category:	IP 50
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	235 x 105 x 70 mm
Weight:	approx. 500 g

Scope of supply:

1 x TELARIS LOOP-TEST
1 x test lead with schuko plug
1 x 3-pole test lead
3 x crocodile clip
3 x test probes
1 x holster
1 x carrying case
1 x 9 V battery, 6 LR 61
1 x user manual

Ordering Information:

Description	Order No.
TELARIS LOOP-TEST EUR	**3087175**
TELARIS LOOP-TEST UK	**3087194**

Important points regarding loop impedance measurement

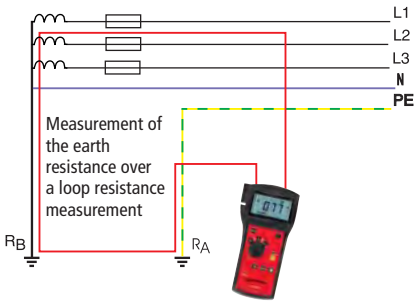
In highly built-up areas, it is very difficult to isolate the probes from regional voltages drops associated with earth electrodes and auxiliary earths. As an alternative, if there is a supply voltage present, a loop impedance measurement can be performed directly by the earth electrode to be tested.

The result of the measurement is then higher as it includes the resistance of the outer conductor. The true earth resistance is thus lower that the value measured. By measuring the loop impedance, it is possible to calculate the short-circuit current that would flow in the event of a fault and trip an upstream overcurrent protection device (fuse).

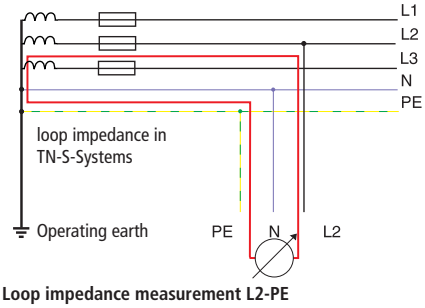
The loop impedance must be so low that a sufficiently high short-circuit current can flow. This is the only way that the required maximum tripping time of the overcurrent protection device can be achieved. For fuses, the disconnecting time is 5 seconds, while a conventional power circuit breaker must trip within 0.4 seconds. The loop consists of the resistance of the current source, the resistance of the outer conductor to the current source and the resistance of the return conductor to the current source.

The measurement is performed by briefly supplying the circuit with a constant current and measuring the voltage before and while the current is flowing using a test resistor that is integrated in the device. As a result of the test current, a voltage drop occurs in the current loop, causing the voltage across the test resistor to drop briefly.

The loop impedance and short-circuit current can then be calculated from the voltage difference. To check loop impedance, only meters that comply with DIN VDE 0413, EN 61557, IEC 61557 may be used.



Earth Tests by of use of loop impedance test



Loop impedance measurement L2-PE

TELARIS® RCD-TEST

RCD tester

Functions

- Testing of all common RCD, incl. selective and AC/DC-sensitive types
- Measurement of contact voltage without tripping RCD breaker
- Tripping with nominal current or rising test current
- Automatic RCD analysis for testing all RCD parameters
- Display of earth resistance

Product information

- Memory for 100 readings
- IR/RS-232 interface for transferring measurements to a PC
- Optional software available
- Preselectable test current: x 0.5/x 1/x 2 and x 5
- Wave form preselectable for AC/DC-sensitive RCD
- Integrated socket test with contact electrode for quick identification of incorrectly connected sockets or missing protective earth
- Large, clear display to enable easy reading of measured values and units
- Auto power-off

Product highlights

- Testing of DC-sensitive RCD (type B)

Technical Data

Display:	LCD, 3½-digit, 1999 digits
Measurement range/resolution	
RCD nominal trip currents:	10/30/100/300/500 mA/1 A, selective: 100 mA/300 mA/ 500 mA/1 A
Contact voltage:	0.6…70 V/0.1 V
Tolerance:	(-0%…+10%) + 6 digits
Trip time:	2…1999 ms/1 ms
Accuracy:	±(2% + 2 digits)
Test current type:	AC, DC and pulsating current
Earth resistance:	0.01…1999 Ω/1 Ω
Accuracy:	±(10% + 10 digits)
Mains voltage:	230 V +10%/-15%
Measurement memory:	approx. 100 readings
Interface:	IR/RS-232
Safety cert.:	EN 61010, IEC 61010; EN 61557, IEC 61557
Measurement category:	CAT III/300 V
Pollution degree:	2
Protection category:	IP 50
Power supply:	6 x 1.5 V battery, IEC LR6
Dimensions:	235 x 105 x 70 mm
Weight:	approx. 650 g

Scope of supply:

1 x TELARIS RCD-TEST
1 x test lead with schuko plug
1 x 3-pole test lead
3 x crocodile clips
3 x test probes
1 x holster
1 x carrying case
6 x 1.5 V battery, IEC LR6
1 x user manual

Ordering Information:

Description	Order No.
TELARIS RCD-TEST EUR	**3087203**
TELARIS RCD-TEST UK	**3087215**

DGC-1000 A

Clamp meter for earth loop measurement

Functions

- Earth loop measurement range: 0.025-1500 Ω
- Leakage current measurement range: 0.2 - 1000 mA
- Current measurement range: 0.2-30 A

Product information

- Measurement memory for 116 readings
- Recording interval: 1-255 s
- Limit adjustment with alarm function
- Data hold function
- Jaw opening: 23 mm
- Calibration loop included

Product highlights

- Earth measurement in closed earthing system without setting of earth stakes
- TRMS current measurement

Technical Data

Display:	LCD, 4-digit, 9999 digits
Display range/resolution	
Earth resistance:	0.025…1500 Ω
Leakage current:	0.2…1.000/10.00/100.0/1000 mA 0.001/0.01/0.1/1 mA
Current:	0.2…4.000 A/30 A 0.001/0.01 A
Measurement memory for 116 readings	
Recording interval:	1…255 s
General	
Crest factor:	< 3
Pollution degree:	2
Measurement category:	CAT III/300 V, CAT II/600 V
Safety cert.:	IEC 61010
Jaw opening:	ø 23 mm
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	257 x 100 x 47 mm
Weight	approx. 640 g

Scope of supply:

1 x DGC-1000A
1 x 9 V battery, IEC 6LR61
1 x user manual
1 x calibration loop
1 x carrying case

Ordering Information:

Description	Order No.
DGC-1000 A	**2731217**

Installation testers

TELARIS® EARTH-TEST

Earth tester

Functions
- Measurement of earth resistance
- Measurement of specific earth resistance

Product information
- Integrated constant current measurement principle enables use in sandy or rocky environments
- Monitoring and display of auxiliary earth and probe resistances
- Display of active test current
- Automatic and manual selection of measurement frequency for interference reduction
- Test voltage preselection
- Large, clear display to enable easy reading of measured values and units
- Auto power-off

Product highlights
- 2-, 3-, and 4-pole earth measurement
- Specific earth measurement according to Wenner method

Technical Data

Display:	LCD, 3-digit, 1999 digits
Measurement principle:	current-voltage measurement
Measurement range/resolution	
Earth resistance:	0.05…19.99 Ω/0.01 Ω 20…199.9 Ω/0.1 Ω 200 Ω/1 Ω
Tolerance:	±(4% rdg. + 2 digits/0.1 Ω)
Probe resistance:	0.1…50 kΩ/0.1 kΩ
Tolerance:	±(10% rdg. + 3 digits)
Measurement current display:	0.1…13 mA/0.1 mA
Tolerance:	±(10% rdg. + 3 digits)
Max. measurement current:	approx. 12 mA
Max. measurement voltage:	25 V/50 V AC, switchable
Frequency:	127 Hz/140 Hz, switchable
Safety cert.:	EN 61010, IEC 61010, EN 61557, IEC 61557
Measurement category:	CAT III/300 V
Pollution degree:	2
Protection category:	IP 50
Power supply:	6 x 1.5 V battery, IEC LR6
Dimensions:	235 x 105 x 70 mm
Weight:	approx. 640 g

Scope of supply:

1 x TELARIS EARTH-TEST
2 x test leads
2 x crocodile clips
1 x holster
1 x carrying case
6 x 1.5 V battery, IEC LR6
1 x user manual

Accessories:

Earth testing accessory kit **AMPRB-ET4**

Ordering Information:

Description	Order No.
TELARIS EARTH-TEST	**2147319**
AMPRB-ET4	**3352363**

AMB-45

Digital insulation tester up to 1000 V

Functions
- Insulation measurement
- Voltage measurement
- Resistance measurement
- Continuity test with beeper

Product information
- Measurement memory for 4000 readings
- RS-232 interface for transferring stored measurements to a PC
- Lock function enables continuous operation
- Additional bar graph display
- Integrated protective holster
- Auto power-off

Product highlights
- Adjustable test time

Technical Data

Display:	LCD, 3¾-digit, 4500 digits
Display range/resolution	
Insulation resistance:	0…4.000/40.00/400.0/4000 MΩ, 0.01/0.01/0.1/1 MΩ
Test voltage:	250, 500, 1000 V
Test current:	> 1 mA
Voltage measurement:	0…600 V AC/DC / 1 V
Resistance measurement:	0…400.0/4000 Ω/0.1/1 Ω (tone at < 40 Ω)
Test current:	200 mA DC
Measurement memory for 4000 readings	
Safety cert.:	EN 61010, IEC 61010, EN 61557-2, IEC 61557-2
Measurement category:	CAT III/600 V
Pollution degree:	2
Power supply:	8 x 1.5 V battery, IEC LR6
Dimensions:	225 x 110 x 54 mm
Weight:	approx. 830 g (incl. batt.)

Scope of supply:

1 x AMB-45
2 x test leads
2 x crocodile clip
2 x test probe
8 x 1.5 V battery, IEC LR6
1 x user manual
1 x carrying case
1 x CD with AMB-45 software
1 x RS-232 interface cable

Ordering Information:

Description	Order No.
AMB-45	**2731024**

TELARIS® ISO-PRO

Insulation tester

Functions

- Insulation measurement
- Low ohm measurement
- Voltage measurement

Product information

- Memory for approx. 500 readings
- IR/RS-232 interface for transferring measurements to a PC
- Optional software available
- Presettable limit values for insulation resistance measurements
- Test lead compensation for exact zero-point adjustment
- Additional bar graph display for insulation measurement
- Large, clear display to enable easy reading of measured values and units
- Backlit display
- Auto power-off

Product highlights

- Adjustable measurement timer enables measurements over longer periods of time
- Test of response voltage of overvoltage suppressors (varistors)
- Also suitable for insulation measurements on floors and walls according to IEC/HD 60364-6

Technical Data

Display:	LCD, 3½-digit, 1999 digits with bar graph
Measurement range/resolution	
Insulation resistance:	0.005…1.999 MΩ/1 kΩ 2…19.99 MΩ/10 kΩ, 20…199.9 MΩ/ 100 kΩ, 200…1999 MΩ/1 MΩ
Test voltage:	100/250/500/1000 V DC
Voltage:	0…600 V AC/DC / 1 V
Measurement timer:	0, 10, 30, 180 s (adjustable)
Voltage protection level:	10…1000 V DC, 6…625 V AC
Low ohm measurement:	0.03…19.99 Ω/0.01 Ω
Test current:	> 200 mA
Measurement memory:	approx. 500 readings
Interface:	IR/RS-232
Safety cert.:	EN 61010, IEC 61010, EN 61557-4, IEC 61557-4
Measurement category:	CAT III/600 V
Pollution degree:	2
Protection category:	IP 50
Power supply:	6 x 1.5 V battery, IEC LR6
Dimensions:	235 x 105 x 70 mm
Weight:	approx. 660 g

Scope of supply:

1 x TELARIS ISO-PRO
2 x test leads
2 x crocodile clips
1 x test probe (PSA 4), attachable
2 x test probes
1 x holster
1 x carrying case
6 x 1.5 V battery, IEC LR6
1 x user manual

Ordering Information:

Description	Order No.
TELARIS ISO-PRO	**3087232**

DAA-16, DAA-32

DAA-16, DAA-32

Three-phase adapter 16 A or 32 A

- Three-phase connector CEE 16 A
- Connections via five separate 4 mm sockets for L1, L2, L3, N and PE
- For quick connection of test devices to three-phase sockets at installation tests according to IEC/HD 60364

DAK-16, DAK-32

DAK-16, DAK-32

Three-phase adapter 16 A or 32 A

- Three-phase coupling CEE 16 A
- Connections via five separate 4 mm sockets for L1, L2, L3, N and PE
- For quick connection of three-phase powered appliances for appliance tests in accordance with DIN VDE 0701-0702

Ordering Information:

Description	Order No.
DAA-16	**2743806**
DAA-32	**2743850**
DAK-16	**2743814**
DAK-32	**2743823**

Machinery tester

MT 204-S

Machinery tester in accordance with EN 60204-1

Functions

- Measurement of protective earth resistance
- Loop/Line impedance measurement
- Insulation resistance measurement
- Residual voltage measurement
- High-voltage test

Product information

- Measurement memory for approx. 2000 readings
- Integrated interface (USB 2.0) for transferring measurements to PC
- Separate interface (USB 2.0) for connecting a barcode scanner and keyboard
- Graphical LCD for measured values, limit values and parameters
- Wiring diagrams and limit values on device lid
- Compact carrying case
- One pair of sockets for all measurements
- Test lead compensation
- High-voltage test with adjustable value for trip current
- Optical and acoustic limit value display

Product highlights

- 10 A test current for protective earth resistance
- 0.2 A test current for protective earth resistance
- Loop/line impedance measurement up to 440 V
- Display of short circuit current (PSC)
- Insulation measurement with 250 V to 500 V test voltage
- Residual voltage measurement; display of discharge voltage/time
- Integrated high-voltage test (can be deactivated via key switch)

Technical Data

Display:	graphical LCD, 128 x 64 pixels
Display range/resolution	
Protective earth resistance: (10 A)	0.00…20.00 Ω/0.01 Ω
Max. Test current/voltage:	> 10 A / > 4 V AC
Protective earth resistance: (0.2 A)	0.00…4.00 Ω/0.01 Ω
Test current/voltage:	> 0.2 A / > 4 V AC
Loop/line impedance:	0.00…20.00 Ω/0.01 Ω
Test current:	20 A (10 ms) at 230 V
Voltage range:	190…440 V
Short circuit current:	11.5 A…23 kA
Insulation resistance:	0.00…100.0 MΩ, 0.01 MΩ, 0.1 MΩ
Test voltage/current:	250 V…500 V (in 10 V steps)/ >1 mA DC
Residual voltage measurement range:	0.0…400 V AC/DC
Measurement time:	1 s, 5 s
Time measurement range:	0…300 s
High-voltage test voltage/current:	1000 V/50 mA AC
Trip current:	5, 10, 25, 50 mA (adjustable)
Measurement memory:	up to 2000 readings
Interfaces (USB 2.0):	PC and barcode scanner
Limit value display:	optical and acoustic
Safety cert.:	IEC/EN 61010-1, EN 61557 parts 2, 3, 4
Measurement category:	CAT IV/300 V, CAT III/600V
Pollution degree:	2
Protection class:	I
Protection category:	IP 40
Power supply:	230 V +10%/-15% 50 Hz, max. 100 VA
Dimensions:	340 x 310 x 170 mm
Weight:	7 kg

Scope of supply:

1 x MT 204-S
1 x mains lead
2 x safety test lead, 2 m each
2 x test lead extension, 10 m each
2 x crocodile clips
1 x interface cable
1 x user manual

Accessories:

Keyboard, USB (German Version) **KBGE-MT204S**

Keyboard, USB (UK version) **KBUK-MT204S**

Barcode Scanner, USB **BC-MT204S**

Ordering Information:

Description	Order No.
MT 204-S	**3454632**
KBGE-MT204S	**3504388**
KBUK-MT204S	**3504395**
BC-MT204S	**3504407**

es control 0100 professional

Software for reports and test certificates in accordance with IEC/HD 60364-6, EN 50110

Functions

- Easy-to-use, upgradable software for managing and logging measurement data in accordance with IEC/HD 60364-6, EN 50110

Software information

- Clear and simple hierarchy
- Easily manageable database structure (client, site, test, distribution and circuit) always visible
- Transfer of measured values from tester to PC
- Automatic creation of new devices under test that are not yet in the database. Tests can thus be printed out quickly and easily.
- Printing of test certificates
- Lists can be exported in text and Excel format
- Windows® Vista and Windows® 7 compatible*

Software highlights

- Access authorisation/user administration for four different user groups
- Comparison and update of different es control databases (replication)
- Result evaluation for tests in accordance with IEC/HD 60364-6 for quick evaluation of overall test
- Ideal software for all providers of repeat testing services or at facility management

Supported Products

- TELARIS 0100-PLUS
- TELARIS RCD-TEST
- TELARIS LOOP-TEST
- TELARIS ISO-PRO

Recommended system requirements

Operating system:	Windows XP; Vista; 7
Processor:	Pentium IV or similar
RAM:	512 MB or higher
Screen:	VGA monitor or higher resolution monitor; Super VGA recommended (800 x 600 or higher)
Available storage:	400 MB
Drive:	CD-ROM
Interface:	RS232; 9-pole

Scope of supply:

1 x es control 0100 professional on CD-ROM
1 x user manual

Accessories:

RS-232 to USB Converter Cable
1217

Ordering Information:

Description	Order No.
ES CONTROL 0100	**2390062**
ES CONTROL COMPLETE	**2390735**
1217	**2389965**

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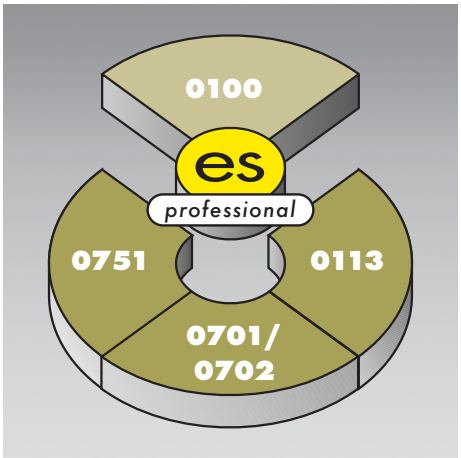
Software



es control 0113 professional

Software for reports and test certificates in accordance with DIN VDE 0701-0702, EN 62353 and EN 60204-1

Functions
- Easy-to-use, upgradable software for managing and logging at appliance testing according to DIN VDE 0701-0702, medical-electrical devices according to EN 62353 and machines according to EN 60204-1

Software information
- Clear and simple hierarchy
- Easily manageable database structure (client, site, location, DUT, test) always visible
- Transfer of measured values from tester to PC
- Automatic creation of new devices under test that are not yet in the database. Tests can thus be printed out quickly and easily.
- Results of a test series can be printed out in form of a list or individual logs for each DUT
- Lists can be exported in text and Excel format
- Windows® Vista and Windows® 7 compatible*

Software highlights
- Access authorisation/user administration for four different user groups
- Comparison and update of different es control databases (replication)
- Interface to external barcode printing programs (Brother® P-Touch), allowing the DUT number and test code to be printed as a barcode
- Ideal software for all providers of repeat testing services or at facility management

Supported Products
- MT 204-S

Recommended system requirements

Operating system:	Windows XP; Vista; 7
Processor:	Pentium IV or similar
RAM:	512 MB or higher
Screen:	VGA monitor or higher resolution monitor; Super VGA recommended (800 x 600 or higher)
Available storage:	400 MB
Drive:	CD-ROM
Interface:	RS232; 9-pole

Scope of supply:

1 x es control 0701/0702/0751/0113 professional on CD-ROM
1 x user manual

Accessories:

RS-232 to USB Converter Cable 1217

Ordering Information:

Description	Order No.
ES CONTROL 0113	**2390081**
ES CONTROL COMPLETE	**2390735**
1217	**2389965**

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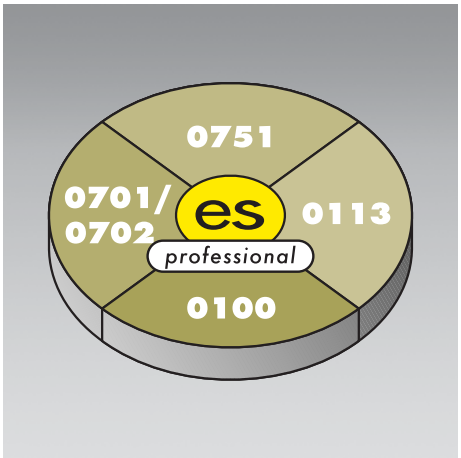

es control professional complete package

software for reports and test certificates in accordance with IEC/HD 60364-6, EN 50110, DIN VDE 0701-0702, EN 62353 and EN 60204-1

Functions

- Easy-to-use, upgradable software for managing and logging according to IEC/HD 60364-6, EN 50110, appliance testing according to DIN VDE 0701/0702, medical-electrical devices according to EN 62353 and machines according to EN 60204-1

Software information

- Clear and simple hierarchy
- Easily manageable database structure (client, site, location, DUT, test or, in the case of electrical systems, client, site, test, distribution and circuit) always visible
- Transfer of measured values from tester to PC
- Automatic creation of new devices under test that are not yet in the database. Tests can thus be printed out quickly and easily.
- Results of a test series can be printed out in form of a list or individual logs for each DUT
- Lists can be exported in text and Excel format
- Windows® Vista and Windows® 7 compatible*

Software highlights

- Comprises es control 0100 professional and es control 0113 professional
- Access authorisation/user administration for four different user groups
- Comparison and update of different es control databases (replication)
- Interface to external barcode printing programs (Brother® P-Touch), allowing the DUT number and test code to be printed as a barcode
- Result evaluation for tests in accordance with IEC/HD 60364-6 for quick evaluation of overall test
- Ideal software for all providers of repeat testing services or in the field of facility management

Supported Products

- TELARIS 0100-PLUS
- TELARIS RCD-TEST
- TELARIS LOOP TEST
- TELARIS ISO-PRO
- MT 204-S

Recommended system requirements

Operating system:	Windows XP; Vista; 7
Processor:	Pentium IV or similar
RAM:	512 MB or higher
Screen:	VGA monitor or higher resolution monitor; Super VGA recommended (800 x 600 or higher)
Available storage:	400 MB
Drive:	CD-ROM
Interface:	RS232; 9-pole

Scope of supply:

1 x es control professional on CD-ROM
1 x user manual

Accessories:

RS-232 to USB Converter Cable 1217

Ordering Information:

Description	Order No.
ES CONTROL COMPLETE	**2390735**
1217	**2839965**

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Software

38SW-A
Software for Multimeter 38XR-A

- Windows software for transferring and processing data to/on a PC
- Extensive export function for processing measurement data, e.g. with MS Excel*
- RS-232 data cable included

Order No. **2727813**

TM-SWA
Software for TMA10A and TMD90A

- Windows software for transferring and processing displaying data to/on a PC
- RS-232 data cable included

Order No. **3027085**

USB-KIT2
Software for ACD-45PQ and ACD-16 TRMS-PRO

- Windows software for transferring and processing data to/on a PC
- data cable included

Order No. **3804929**

RS-232 to USB Converter Cable

Order No. **2389565**

Interface adapter
for TELARIS

- For connection to a PC via RS-232

Order No. **2145770**

AMPRB-ET4
Earth Testing Accessory Kit

- Supported product: TELARIS EARTH

Scope of supply:
1 x Carrying case
4 x Spikes (235 x Ø 10 mm),
1 x Test lead red (25 m)
1 x Test lead blue (25 m),
1 x Test lead green (5 m)
1 x Test lead black (5 m)
4 x Cable reel
4 x Crocodile clips

Order No. **3352363**

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IR | Data Hold | °C

IR608A
Infrared thermometer

Functions
- Non-contact temperature measurement

Product information
- Switchable between °C and °F display
- Integrated measurement memory (data hold)
- Backlight
- Distance to spot size ratio: 8:1
- Auto power-off

Product highlights
- Laser-based targeting
- Handy and compact „pistol grip“ design

Technical Data

Display:	LCD, 4-digit
Measurement range:	-18…+400°C, 0…750°F
Resolution:	0.2°C/0.5°F
Basic accuracy:	±2% or ±2°C (±3.5°F)
Emissivity:	0.95 (preset)
Response time:	500 ms
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	152 x 101 x 38 mm
Weight:	approx. 227 g

Scope of supply:

1 x IR608A
1 x 9 V battery, IEC 6LR61
1 x user manual

Ordering Information:

Description	Order No.
IR608 A	**3015690**

NTC Type | Data Hold | min / max | °C

TH-1
Digital humidity and temperature meter

Functions
- Humidity measurement
- Temperature measurement

Product information
- Probe integrated in device
- Switchable between °C and °F measurement
- Integrated measurement memory (data hold)
- MIN and MAX data hold
- Auto power-off

Product highlights
- Compact and handy design
- Dew point
- Wet bulb

Technical Data

Display:	dual-LCD
Humidity measurement	
Measurement range:	0…100% rel. humidity
Resolution:	0.1%
Accuracy:	±3% rel. humidity
Temperature measurement	
Measurement range:	-20…+50°C/-4…+122°F
Resolution:	0.1°C/0.1°F
Accuracy:	±0.6°C/±1°F
Power supply:	1 x 3 V battery, IEC 2032
Dimensions:	175 x 42 x 16 mm
Weight:	approx. 120 g

Scope of supply:

1 x TH-1
1 x 3 V battery, IEC 2032
1 x user manual

Ordering Information:

Description	Order No.
TH-1	**3311871**

Environment

NTC Type | Data Hold | °C

TPP1-C1

Pocket thermometer with immersion probe

Functions
- Temperature measurement with integrated NTC sensor

Product information
- Immersion probe
- Measurement memory (data hold)
- Compact design
- With protective sleeve/holder (TPP1-C1 only)

TPP2-C1

Pocket thermometer with surface probe

Similar as TPP1-C1, but with:
- Surface probe and no protective sleeve/holder

Technical Data

Display:	LCD, 3½-digit	
Measurement range:	-50…+250°C	
Range	Resolution	Accuracy
-50…-20°C	1°C	±3°C
-19.9…+49.9°C	0.1°C	±2°C
+50.0…199.9°C	0.1°C	±(3% rdg. + 1°C)
+200…250°C	1°C	±(3% rdg. + 1°C)
Temperature change/response time:	> 5 K/s	
Power supply:	1 x 3 V battery, IEC 2032	
Dimensions (with protective sleeve):	approx. 40 x 30 x 160 mm	
Weight:	approx. 16 g	

Scope of supply:

1 x TPP1-C1 or TPP2-C1
1 x 3 V battery, IEC 2032
1 x user manual

Ordering Information:

Description		Order No.
TPP1-C1	TPP1-C1	**2826634**
TPP2-C1	TPP2-C1	**2826652**

PC | Data Logger | °C

TR100-A

Temperature Data Logger with Digital Display

Functions
- Temperature measurement
- Data Logger

Product information
- Wall mountable
- Air Temperature displays in Celsius/Fahrenheit is selectable
- Offers visible LEDs warnings to monitor IAQ condition
- Instrument for indoor air quality monitoring
- Memory points selection: 1000, 2000, 4000, 8000, 12000,16000
- Auto power off function

Product highlights
- USB Interface
- IP65 rated

Technical Data

Display:	LCD, 3¾ digit, 1999 digits
LED display:	red: Hi, LO Alarm; Yellow: Record
Temperature range:	-40…85°C (-40…185°F)
Basic accuracy:	
Temperature measurement:	± 0.6°C (-20…50°C / -4…122°F), ±1.2°C / 1.2°F all others
Resolution:	
Temperature:	0.1°C / 0.1°F
Sample points:	1k / 2k / 4k / 8k / 12k / 16k
Power supply:	1 x 3 V battery, IEC 2032
Protection degree:	IP65
Dimension:	75 x 55 x 23 mm
Weight:	approx. 200 g

Scope of supply:

1 x TR100-A
1 x user manual
1 x 3 V battery, IEC 2032
1 x USB-cable
1 x CD Download Suite

Accessories:

External temperature sensor
TPK-60

Ordering Information:

Description	Order No.
TR100-A	**3477293**
TPK-60	**3503184**

PC | Data Logger | °C

TR200-A

Temperature / RH Data Logger with Digital Display

Functions
- Temperature measurement
- Relative Humidity measurement
- Data Logger

Product information
- Wall mountable
- Air Temperature displays in Celsius/Fahrenheit is selectable
- Offers visible LEDs warnings to monitor IAQ condition
- Instrument for indoor air quality monitoring
- Memory points selection : 1000, 2000, 4000, 8000, 12000,16000
- Auto power off function

Product highlights
- USB Interface
- IP65 rated

Technical Data

Display	LCD, 3¾ digit, 1999 digits
LED display	Red: Hi, LO Alarm Yellow: Record
Measurement ranges	
Temperature range	
Internal sensor	-40°C…85°C (-40°F…185°F)
External probe	-40°C…100°C (-40°F…212°F)
Relative Humidity	0.0…99.9%
Basic accuracy	
Temperature	±0.6°C (-20°C…50°C) ±1.2°C for all others ±1°F (-4°F…122°F) ±1.2°F for all others
Relative Humidity	±3% at 25°C / 77°F 5% for all others
Resolution Temperature	0.1°C / 0.1°F
RH Resolution	0.1%
Sample points	1k / 2k / 4k / 8k / 12k / 16k
Power supply	1 x 3 V battery, IEC 2032
Protection degree	IP65
Dimensions	75 x 55 x 23 mm
Weight	approx. 200 g

Scope of supply:
1 x TR200-A
1 x user manual
1 x 3 V battery, IEC 2032
1 x USB-cable
1 x CD Download Suite

Accessories:
External temperature sensor
TPK-60

Ordering Information:

Description	Order No.
TR200-A	**3477302**
TPK-60	**3503184**

PC | Data Logger | °C

TR300

Temperature and Relative Humidity Data Logger

Functions
- Temperature measurement
- Relative Humidity measurement
- Data Logger

Product information
- Instrument for indoor air quality monitoring
- Wall mountable, self-standing or tripod mountable
- Displays Temperature, RH plus Real time date/hour stamp
- Air Temperature or Dew Point (DP) display and Celsius/Fahrenheit are selectable
- Offers both visible LEDs plus audible warnings to monitor IAQ condition
- Small size design
- Memory points selection: 1000, 2000, 4000, 6000, 8000,12000,16000

Product highlights
- USB interface
- Extra large digital display

Technical Data

Display	LCD
Ranges	
Temperature	-20…70°C (-4…158°F)
Relative Humidity	0…100%
Basic accuracy	Relative Humidity ±3% @ 10…90% ±5% @ others
Temperature	±0.6°C (±1°F) @ 0…50°C (32°F…122°F) ±1.2°C (±2°F) for all others
Resolution	
Temperature	0.1°C/ 0.1°F
Humidity	0.1%
Power supply	4 x 1.5 V battery, IEC LR6
Dimensions	175 x 42 x 16 mm
Weight	approx. 200 g

Scope of supply:
1 x TR300
1 x user manual
4 x 1.5 V battery, IEC LR6
1 x USB-cable
1 x CD Download Suite

Ordering Information:

Description	Order No.
TR300	**3311844**

Environment

NEW

TMD-50

Digital Thermometer Type K with two Inputs

Functions
- Temperature measurement with connection for two sensors
- Measurement of the temperature difference

Product Information
- Connection for two temperature sensors type K
- Switchable for display in °C or °F
- Integrated measurement memory (Data Hold)
- MIN/MAX and relative value measurement
- Measurement of the average temperature
- Backlight
- Auto-Power-Off

Product Highlights
- Best precision 0.1%
- T1-T2 (temperature difference)
- Shock and impact-resistant by standard protective cover

K Type | Data Hold | min / max

NEW

TMD-53

Digital Thermometer Type K/Type J with two Inputs

similar as TMD-50 and also offers:
- Connection for two temperature sensors type K and type J
- Alarm function with Hi/Lo setting
- Clear multi-function display for T1, T2 and T1-T2 (temperature difference)

K Type | J Type | Data Hold | min / max

NEW

TMD-56

Digital Thermometer with Data Logger and USB Connection

similar as TMD-53 and also offers:
- Connection for two temperature sensors (for types K, J, T, R/S, N and E)
- Integrated real time clock and date
- Clear multi-function display for date, time, T1, T2 and T1-T2 (temperature difference)
- USB interface
- Software included
- Data logger for 16000 measurements (different intervals can be selected)

K Type | J, T Type | R/S, N, E Type | Data Hold | min / max | PC | Data Logger

Technical Data TMD-50

Display	LCD, 3½-digit, 1999 digits
Measuring range	type K -200…+1350° C (-328…+1999° F)
Basic accuracy	
±(0.1% rdg. + 1°C)	at -60°C…1350°C
±(0.1% rdg. + 2°C)	at -60°C…200°C
±(0.1% rdg. + 2°F)	at -76°F…1999°F
±(0.1% rdg. + 4°F)	at -76°F…-328°F
Resolution	0.1 °C/°F
Power supply	4 x battery 1.5 V, IEC R03, AAA
Dimensions	approx. 160 x 85 x 30 mm
Weight	approx. 280 g

Technical Data TMD-53

Display	LCD, 5-digit, 99999 digits
Measuring range	type K -200…+1350° C (-328…+2462° F)
Basic accuracy	
±(0.05% rdg. + 0.3°C)	at -50°C…1350°C
±(0.05% rdg. + 0.7°C)	at -50°C…-200°C
±(0.05% rdg. + 0.6°F)	at -58°F…2498°F
±(0.05% rdg. + 1.4°F)	at -58°F…-328°F
Resolution	0.1 °C/°F
Power supply	4 x battery 1.5 V, IEC R03, AAA
Dimensions	approx. 160 x 85 x 30 mm
Weight	approx. 280 g

Technical Data TMD-56

Display	LCD, 4½-digit, 19999 digits
Measuring range	type K -200°C…1350°C (-328°F…2462°F)
Basic accuracy type K	
±(0.05% rdg. + 0.3°C)	at -50°C…1350°C
±(0.05% rdg. + 0.7°C)	at -50°C…-210°C
±(0.05% rdg. + 0.6°F)	at -58°F…2501°F
±(0.05% rdg. + 1.4°F)	at -58°F…-346°F
Resolution	0.1 °C/°F
Power supply	4 x battery 1.5 V, IEC R03, AAA
Dimensions	approx. 160 x 85 x 30 mm
Weight	approx. 360 g

Scope of supply TMD-50/TMD-53:

1 x TMD-50 or TMD-53
2 x type K wire sensor
4 x Battery 1.5 V, IEC R03, AAA
1 x user manual

Scope of supply TMD-56:

1 x TMD-56
2 x type K wire sensor
1 x USB cable
1 x Software CD
4 x Battery 1.5 V, IEC R03, AAA
1 x user manual

Ordering Information:

Description	Order No.
TMD-50	**3730150**
TMD-53	**3730085**
TDM-56	**3730138**

°C | min./max. Wertspeicher | Data Hold

TH-3
Digital humidity and temperature meter

Functions
- Humidity measurement
- Temperature measurement

Product information
- Probe integrated in device
- Switchable between °C and °F measurement
- Integrated measurement memory (data hold)
- MIN and MAX data hold
- Auto power-off

THWD-3
Digital humidity and temperature meter

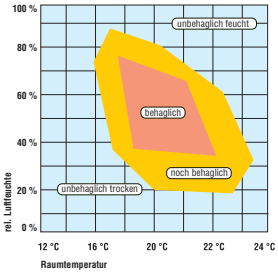
same as TH-3 and also offers:
- Dew point measurement
- Measurement of wet bulb temperature

Technical Data

Display:	dual-LCD, 3½-digit
Humidity measurement	
Measurement range:	5…95% rel. humidity
Resolution:	0.1%
Accuracy:	±3% rel. humidity
Response time:	< 3 min.
Temperature measurement	
Measurement range:	-20…+60°C/-4…+140°F
Resolution:	0.1°C/0.1°F
Accuracy:	±0.8°C/±1.6°F
Response time:	< 10 sec.
Power supply:	1 x 9 V battery, IEC 6LR61 or 6F22
Dimensions:	240 x 54 x 34 mm
Weight:	approx. 180 g

Scope of supply:

1 x TH-3 or THWD-3
1 x carrying case
1 x 9 V battery, IEC 6LR61
1 x user manual



Ordering Information:

Description	Order No.
TH-3	**3027060**
THWD-3	**3033042**

NEW

Data Hold | °C

MT-10
Building materials & wood moisture meter

Functions
- Wood and building moisture measurement
- Temperature measurement

Product Information
- Measuring sensor integrated in the instrument
- Switchable for measurement in °C or °F and wood or building materials
- Backlight
- Auto-Power-Off

Product Highlights
- Compact and handy housing shape
- Quick and simple information about the moisture level by means of 3 LEDs:
  - green - air-dry environment
  - yellow - increased moisture
  - red - excessive moisture

Technical Data

Display	LCD, 3½-digit and 3 LEDs
Moisture measurement	
Measuring principle of electrical resistance	
Measuring range	
Wood	8…60%
Building material	0.3…2.0%
Temperature	0…40°C or 32…99°F
Resolution	
Wood	0.1%
Building material	0.01%
Temperature	0.1°C / 0.2°F
Precision	
Wood	±2%
Building material	±0.1%
Temperature	±1°C / ±2°F
Power supply	1 x battery 9V, 6F22
Dimensions	145 x 60 x 31 mm
Weight	approx. 100 g

Scope of supply:

1 x MT-10
1 x battery 9V, 6F22
1 x user manual

Ordering Information:

Description	Order No.
MT-10	**3503178**

Environment

TPK-59
Flex. wire probe, 4 mm (0.5 m)

Type K temperature probe
Temperature range: -46°C...+316°C
Accuracy: ±1.5°C

Order No.
2733660

TA-1A
K-type Temperature, Adapter with shrouds

- Adaptor with 4 mm plug
- Connector for Type K probes

Order No.
2766054

NEW

TPK-60
Temperature Measuring Sensor

- 2.5 mm jack plug
- Suitable for TR100-A and TR200-A
- Cable length 115 mm
- Temperature range (see TR100-A / TR200-A)

Order No.
3503184

Range 0,1... 200000 Lux

Data Hold

LM-100
Digital Luxmeter

Functions
- Light measurement

Product information
- Manual range selection
- Silicon sensor
- Integrated measurement memory (data hold, MAX)

Technical Data

Display:	LCD 3½-digit
Measurement range:	0…200, 2000, 20,000, 200,000 lux 0…20, 200, 2000, 20,000 fc
Resolution	0.1, 1, 10, 100 lux/ 0.01, 0.1, 1, 10 fc
Accuracy:	< 10%
Power supply:	9 V battery, IEC 6F22
Device dimensions:	130 x 63 x 38 mm
Sensor dimensions:	80 x 55 x 29 mm
Weight:	approx. 220 g

Scope of supply:

1 x LM-100
1 x 9 V battery, IEC 6F22
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
LM-100	**3052348**

Range 0,1... 200000 Lux

Data Hold

Max Hold

LM-120
Digital Luxmeter

Functions
- Light measurement

Product information
- Automatic and manual range selection
- Silicon sensor
- Integrated measurement memory (data hold, MAX/MIN)
- Auto power-off
- Zero adjustment button

Technical Data

Display:	LCD 3½-digit
Measurement range:	0…20, 0…200, 2000, 20,000, 200,000 lux 0…20, 200, 2000, 20,000 fc
Resolution	0.1, 1, 10, 100 lux/ 0.01, 0.1, 1, 10 fc
Accuracy:	< 10%
Power supply:	9 V battery, IEC 6F22
Device dimensions:	130 x 63 x 38 mm
Sensor dimensions:	80 x 55 x 29 mm
Weight:	approx. 220 g

Scope of supply:

1 x LM-120
1 x 9 V battery, IEC 6F22
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
LM-120	**3052353**

Environment

SM-10
Sound meter

Functions
- Measurement of sound level

Product information
- Measurement according to frequency evaluation filters A and C, with direct display in dB
- Integrated measurement memory (data hold, MAX)
- Switchable between fast and slow response times
- Backlight

Data Hold | Max Hold

Technical Data

Display:	LCD, 4-digit
Measurement ranges	
A:	30…130 dB (resolution: 0.1 dB)
C:	35…130 dB (resolution: 0.1 dB)
Frequency range:	31.5 Hz…8 kHz
Tolerance:	±1.5 dB
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	200 x 55 x 38 mm
Weight:	approx. 230 g

Scope of supply:

1 x SM-10 sound meter
1 x 9 V battery, IEC 6LR61
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
SM-10	**3052366**

SM-20A
Sound meter

Functions
- Measurement of sound level

Product information
- Measurement according to frequency evaluation filters A and C, with direct display in dB
- Integrated measurement memory (data hold, MAX)
- Switchable between fast and slow response times
- Backlight

Product highlights
- USB interface for PC connection
- Internal data logger for 14,000 readings

Data Hold | Max Hold | PC | Data Logger

Technical Data

Display:	LCD, 4-digit
Measurement ranges	
A:	30…130 dB (resolution: 0.1 dB)
C:	35…130 dB (resolution: 0.1 dB)
Frequency range:	31.5 Hz…8 kHz
Tolerance:	±1.5 dB
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	200 x 55 x 38 mm
Weight:	approx. 230 g

Scope of supply:

1 x SM-20A sound meter
1 x 9 V battery, IEC 6LR61
1 x interface cable
1 x software
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
SM-20A	**3477333**

94 dB
114 dB

SM-CAL1
Sound level calibrator

Function
- Calibration of sound level meters

Device information
- Two output levels: 94 dB and 114 dB
- Fits to 1/2" microphones

Technical Data

Output level	94 db, 114 dB
Frequency	1 kHz (±4%)
Accuracy	±0,5 dB
Power supply	1 x 9 V battery, IEC 6F22
Dimensions	Ø 48 x 125 mm
Weight	approx. 285 g

Scope of supply:

1 x SM-CAL1
1 x Adaptor 1/2"
1 x 9 V, battery IEC 6F22
1 x user manual

Ordering Information:

Description	Order No.
SM-CAL1	**3052382**

Data Hold | min/max | PC | °C

TMA10A
Anemometer

Functions
- Air velocity measurement (m/s)
- Airflow measurement (m³/s)
- Temperature measurement

Product information
- Integrated measurement memory (data hold)
- MIN/MAX and AVG value measurement
- Auto power-off (can be deactivated)
- Ideal for measurements in ventilation, air-conditioning and heating systems
- Flexible precision vane

Product highlights
- RS-232 interface for PC connection
- TM-SWA software (optional)

Technical Data

Display:	LCD, 4-digit, 9999 digits
Measurement range (m/s):	0.40…25.00 m/s (resolution: 0.01 m/s) 0.01…99.99 m³ (resolution: 0.01 m³)
Basic accuracy:	±(3% rdg. (m³/s)
Temperature:	0…50°C or 32…122°F (resolution: 0.1°F/°C)
Basic accuracy:	±1.5°F/0.8°C
Power supply:	1 x 9 V battery, IEC 6LR61
Dimensions:	181 x 71 x 38 mm
Weight:	approx. 360 g (incl. battery)

Scope of supply:

1 x TMA10A
1 x carrying case
1 x 9 V battery, IEC 6LR61
1 x user manual

Accessories:

Records two channels simultaneously incl. Interface Cable (RS-232)
TM-SWA

Ordering Information:

Description	Order No.
TMA10A	**2817785**
TM-SWA	**3027085**

Environment

Data Hold | min/max | PC | °C | Data Logger

TMA40-A

Data logger anemometer with humidity and temperature measurement

Functions
- Air velocity measurement (m/s)
- Airflow measurement (m^3/s)
- Temperature measurement
- Humidity measurement

Product information
- Integrated measurement memory (data hold)
- Large backlit LCD
- MIN/MAX and AVG value measurement
- Auto power-off (can be deactivated)
- Ideal for measurements in ventilation, air-conditioning and heating systems
- Flexible precision vane

Product highlights
- Data logger for 2400 readings
- USB interface for PC connection

Technical Data

Display:	LCD
Measurement range (m/s):	0.4…32 m/s (resolution: 0.1 m/s)
	(m^3/s) 0…99999 m^3 (resolution: 0.1 m^3)
Basic accuracy:	±(3% rdg.)
Temperature:	-20…70°C or -4…158°F (resolution: 0.1°F/°C)
Basic accuracy:	±1°F/0.6°C
Humidity:	0…100%
Basic accuracy:	±3% between 10% and 99%
Power supply:	4 x 1.5 V battery, IEC LR03
Dimensions:	165 x 70 x 53 mm
Weight:	approx. 360 g (incl. battery)

Scope of supply:

1 x TMA40-A
1 x carrying case
4 x 1.5 V battery, IEC LR03
1 x USB-cable
1 x software
1 x user manual

Ordering Information:

Description	Order No.
TMA40-A	**3477287**

NEW

Data Hold | °C

TMA5

Mini Anemometer

Functions
- Measurement of air speed (m/s)
- Temperature measurement
- Moisture measurement
- Measurement of the dew point
- Measurement of the wet bulb temperature (Wet bulb)

Product Information
- Automatic measuring range selection
- Integrated measurement memory (Data Hold)
- Auto-Power-Off (disconnectable)

Product Highlights
- External temperature sensor connectable

Technical Data

Display	LCD, 3¾-digit, 3999 digits
Measurement ranges	
Air velocity	1.1...20.0 m/s
	0.7...72.0 km/h
	0.5...44.7 mph
	60...3937 ft/m
	0.4...38.8 KNT
	1...8 BF
Basic accuracy	± 5% rdg. or ± 5 digits (higher value applies)
Temperature (int.)	0°C...+50°C
	32°F...+122°F
Resolution	0.1 °C/°F
Basic accuracy	± 1°C
Temperature (ext.)	-20°C...+70°C
	-4°F...+158°F
Resolution	0.1 °C/°F
Basic accuracy	± 0.6°C
Humidity	5%...95% rel. humidity
Resolution	0.1% rel. humidity
Basic accuracy	± 3.5% rel. humidity
Power supply	1 x battery 3.0 V, IEC CR 2032
Dimensions	136 × 46 × 17 mm
Weight	approx.135 g

Scope of supply:

1 x TMA5
1 x Carrying case
1 x Temperatur probe TPK60
1 x Wrist strap
2 x 3,0 V battery, IEC CR 2032
1 x user manual

Ordering Information:

Description	Order No.
TMA5	**3503169**

CM100
Carbon monoxide meter

Functions
- Measuring and displaying the presence of carbon monoxide

Product information
- Adjustable CO warning level
- The CM100's alarm is preset to 25ppm to warn about possible danger
- User can adjust the alarm level by choosing CO gas levels: 25, 30, 35, 45, 50, 70, 100 and 200 ppm
- Dual digital display
- Backlight
- Auto Power Off
- Self-Test feature

Technical Data

Range	0…999 ppm
Accuracy	± 20% at 0…100 ppm ± 15% at 100…500 ppm (at 20 °C ±5%, 50 ±20% RH)
Resolution	1 ppm
Battery Life	250 hours without backlight 35 hours with backlight
Power supply	3 x 1.5 V battery, IEC LR03
Dimension	175 x 47 x 28 mm
Weight	approx. 130 g

CO

Scope of supply:
1 x CM100 Carbon Monixide meter
3 x 1.5 V battery, IEC LR03
1 x carrying case
1 x user manual

Ordering Information:

Description	Order No.
CM100	**3311826**

MANO2-A
Manometer for Differential Pressure

Functions
- Measuring of pressure

Product information
- Also used for Pneumatic controls
- Five selectable units of measure: In H_2O, psi, mbar, bar, mm H_2O
- Ideal for measuring HVAC/R pressure levels
- Also used for Pneumatic controls
- Offers Maximum and Minimum value recordings, Data Hold
- Auto power off function, Large backlight LCD
- Includes connection hoses

Product highlights
- USB interface

Technical Data

Range	0…138 mbar / 0…±2 Psi
Accuracy	± 0.3 % full scale at 25°C (77°F)
Response Time	0.5 second
Sensitivity	
Resolution	per 0.401 in of H_2O 0.001 per 0.0145 Psi 0.1 per mbar
Power supply	1 x 9 V battery, IEC 6LR61 included
Dimension	182 x 72 x 30 mm
Weight	approx. 220 g

PC | Data Hold | min / max

Scope of supply:
1 x MANO2-A
1 x carrying case
1 x 9 V battery, IEC 6LR61
1 x user manual
2 x connection hoses Ø 4 (ID) x Ø 6 (OD) x 500 mm

Ordering Information:

Description	Order No.
MANO2-A	**3477279**

Environment

NEW

TX900
Microwave Leakage Detector

Functions
- Measures for microwave leakage
- Tests of oven power

Product information
- 8 dipole sensors – allows detection of plane wave signals of any polarization
- Internal temperature compensation
- Compact, ergonomic design
- Low battery indication
- Analogue Bar Graph
- Auto-zero

Product Highlights
- Additional ccessories supplied: two 500 ml plastic beakers, spirit (alcohol) glass thermometer for oven power test

Technical Data

Display	LCD, 2½ Digit with 10 point bargraph display
RF Power sensing range	0...10 mW/cm²
Nominal detecting frequency	2.45 GHz
Basic accuracy	± 1dB (plane wave, at circular polarization)
Response to step input:	< 1 s
Resolution	0.1 mW/cm²
Sensor - source spacing	circular - 5 cm
Power supply	1 x battery, 9 V, IEC 6LR61
Dimensions	230 x 42 x 44 mm
Weight	approx. 150 g

Scope of supply:

1 x TX-900 Microwave RF Detector
2 x 500 ml plastic beakers Spirit (alcohol) glass thermometer
1 x battery, 9 V, IEC 6LR61
1 x Carrying case
1 x Sample set of "RF Emission Labels"
1 x User manual

Ordering Information:

Description	Order No.
TX900	**3390352**

TACH20
Digital tachometer

Functions
- Rotational speed measurement
- Surface speed measurement
- Length measurement

Product information
- Display of rotational speed
- Display of surface speed in m/min, ft/min and in/min
- Display of length measurement in m, ft and inch
- Integrated measurement memory
- Display shows last, maximum or minimum value
- Optical (non-contact) or mechanical, adapter-based measurement
- Visible optical measurement performed using infrared beam
- Auto power-off after approx. 30 sec. (data remains stored)

Technical Data

Display:	LCD, 5-digit
Measurement ranges	
Rotational speed:	1…99,999 rpm
Surface speed:	0.1…1999 m/min
Length:	0.02…99,999 m
Basic accuracy	±0.2%, ±0.02% (rpm)
Measurement time:	0.5 s/1 period at low rpm
Measurement distance:	max. 350 mm
Power supply:	2 x 1.5 V battery, IEC LR6
Dimensions:	180 x 60 x 25 mm
Weight:	approx. 195 g

Scope of supply:

1 x TACH20
1 x mechanical measurement adapter
1 x extension
2 x test prod
2 x measuring wheel
10 x reflective stickers
2 x 1.5 V battery, IEC LR6
1 x carrying case
1 x user manual

Accessories:

Reflective Sticker
(10 pcs., each length 75 mm)

Ordering Information:

Description	Order No.
TACH20	**3311961**
Reflective Sticker	**2145762**

Scope of supply:

1 x PQ55A
4 x current clamps (3…1000 A)
4 x crocodile clips
4 x safety test leads
8 x 1.5 V battery, LR6
1 x mains adapter
1 x RS-232 cable
1 x large carrying case
1 x PC software (English)
for Windows XP/2000/ME
1 x user manual

PQ55A

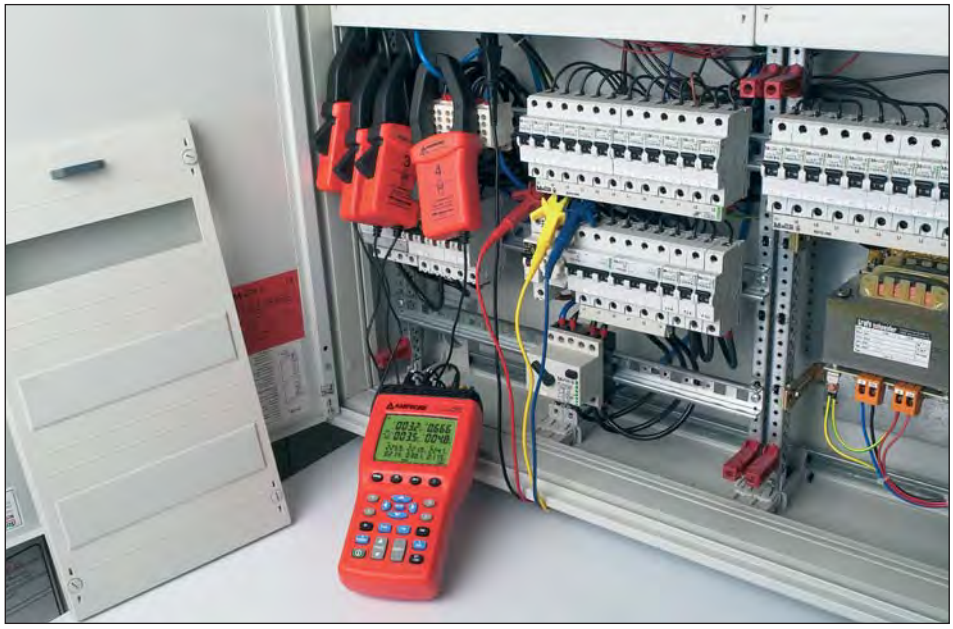
3-phase power and energy analyser

Functions

- Comprehensive real-time monitoring, recording and analysis of 3-phase systems
- Voltage measurement (true RMS)
- Current measurement (true RMS)
- Power factor measurement
- Phase angle measurement
- Power analysis (active, apparent and reactive power)
- 4. Current clamp for neutral line measurement
- Suitable for use in housing construction, offices and small businesses

Product information

- Internal 512 kB data logger for long-term monitoring
- Internal measurement memory for up to 99 individual readings
- Multifunctional measured value display for all input signals
- Power supply via batteries or external mains adapter
- Data transfer via optically isolated RS-232 interface
- Windows software for data analysis



Technical Data

Voltage measurement:
3 input channels with common reference point "N"

Measurement range:	0…600 Vrms
Resolution:	0.1 V
Accuracy:	±(1% rdg. + 10 digits) for voltages > 80 V
Network frequency:	50 Hz (excl. frequency inverter operation)

Current measurement range

phase 1…3:	3…1000 A
Measurement range „N“:	3…250 A, resolution: 0.1 A
Basic accuracy:	±(2.5% rdg. + 15 digits) ±1% for currents > 3 A
Permissible overload:	10% (for sinusoidal currents)
Active power (P)	
display range:	0…999.9 kW
Apparent power (S)	
display range:	0…-999.9 kVA
Reactive power (Q)	
display range:	0…999.9 kVar
Power factor (PF)	
display range:	0…+1
Phase angle	
display range:	0°…90°
Frequency measurement range (for voltages > 80 V):	45…85 Hz

Phase sequence detection (for conductor voltages > 80 V)
Energy measurement (active, apparent and reactive power)

Accuracy:	±(3.5% rdg. + 20 digits)
Data logger:	512 kB, non-volatile memory, max. 20,000 readings, max. 10 measurement series, max. 12,000 readings per measurement series
Sample rate (adjustable):	5 s, 30 s, 1 min, 2 min
Manual measurement memory:	max. 99 readings

General information

Display:	multifunctional LCD

Data transfer via optically isolated RS-232 interface

Frequency range:	42…63 Hz
Power consumption:	approx. 10 VA
Pollution degree:	2
Protection class:	II
Protection category:	IP 30
Measurement category:	CAT III/600 V
Safety cert.:	EN 61010, IEC 61010
Power supply:	8 x 1.5 V battery, LR6 Battery life: typ. 50 hrs
Mains adapter:	12…15 V/300 mA

Ambient conditions:

Operating temperature:	0°C…+50°C
Storage temperature:	-10°C…+60°C
Dimensions	
Device (W x H x D):	235 x 117 x 54 mm
Weight (incl. batt.):	approx. 730 g

Ordering Information:

Description	Order No.
PQ55A	**3037739**

Power Quality

NEW

DM-II PLUS

Power Analyser with Data Logger

Functions

- Extensive real time monitoring, recording and analysis of 3-phase systems
- Voltage measurement (True RMS)
- Current measurement (True RMS)
- Power factor measurement
- Power analysis (active, apparent and reactive power)
- Energy analysis (active, apparent and reactive energy)
- Application in industry

Product Information

- Internal data logger 2 MB for long-term monitoring
- Internal measurement memory for max. 64 parameters
- Multi-functional measurement display of all input signals
- Power supply either via batteries or via external mains adapter
- Data transmission via RS-232 interface
- Software for data analysis included in scope of supply

Scope of Supply:

1 x DM-II PLUS in robust carrying case
3 x current clamps DM-CT-HTA
(5…1000 A, opening 53 mm)
4 x safety test leads
4 x crocodile clips
1 x mains adapter 12 V / 420 mA DC
(Type DMT-EXTPS)
1 x RS-232 cable
1 x USB on RS-232 adapter
1 x pouch for accessories
1 x software
1 x user manual

Technical Data

Voltage measurement:
3 separate input channels with common reference point "N"

Measuring range	15…600 Veff
Resolution	0.2/0.4 V
Mains frequency	50/60 Hz (not for FU operation)
Current measurement:	Measuring range 5…1000 A (with current clamp DM-CT-HTA)
Current measurement:	Measuring range 15…3000 A (with current clamp AM-FLEX 33)
Resolution	0.1 A
Active power P,	
Display range	0…999.9 MW
Apparent power S,	
Display range	0…999.9 MVA
Reactive power Q,	
Display range	0…999.9 Mvar
Power factor PF,	
Display range	0…+1
Phase angle,	
Display range	0°…90°
Frequency measurement	
Measuring range	47…53 / 57…63 Hz
Energy measurement (active, apparent and reactive energy)	
Harmonic measurement DC,	1…49 Harmonic
Data logger	memory 2 MB, max. 64 parameters
Integration times	5 s, 10 s, 30 s, 1 min, 2 min, 5 min, 10 min, 15 min, 30 min, 60 min
Sampling rate	128 per period
General	
Dot matrix display	LC display (128 x 128 dots), with background light
Data transmission	via optically insulated RS-232 interface
Frequency range	50/60 Hz
Load power	approx. 17 VA
Pollution degree:	2
Protection class	II
Measurement category:	CAT III/600 V
Safety cert.:	DIN VDE 0411/EN 61010/ IEC 61010
Power supply	6 x batteries 1.5 V, IEC LR20, Mono
Battery service life	typ. 22 h
Mains adapter	12 V / 420 mA DC (Type DMT-EXTPS)
Dimensions	
Measuring instrument (W x H x D)	444 x 273 x 190 mm
Weight (including batt.)	approx. 5.2 kg

Accessories:

Current transformer 200 A - an adapter cable ACF-6A is required for the connection

AM-FLEX33
(flexible current transformer)

ACF-6A (adapter cable)

Ordering Information:

Description	Order No.
DM-II PLUS	**2770986**
A-300	**2744335**
AM-FLEX33	**2734206**
ACF-6A	**2743889**

Accessories

AMPROBE®

EU-200
Test lead set

Accessory information
- Test lead set with 4 mm safety technology
- 4 mm test probes

Technical Data

Measurement category:	CAT III/1000 V
Pollution degree:	2
Safety cert.:	EN 61010, IEC 61010

Scope of supply:

2 x test leads
2 x test probes
2 x crocodile clips

Order No. **2745046**

TL35B
test lead set with safety crocodile clips

Accessory information
- Test lead set with 4 mm safety technology
- PVC-insulated leads
- Threaded test probes
- Safety crocodile clips with threaded connection

Technical Data

Measurement category:	CAT IV/600 V, CAT III/1000 V
Pollution degree:	2
Safety cert.:	EN 61010, IEC 61010

Scope of supply:

2 x test leads, approx. 1 m
2 x crocodile clips

Order No. **3068232**

TL36A
Test lead set with crocodile clips

Accessory information
- Test lead set with 4 mm safety technology
- PVC-insulated leads
- Threaded test probes
- Crocodile clips with threaded connection

Technical Data

Measurement category:	CAT IV/600 V, CAT III/1000 V
Pollution degree:	2
Safety cert.:	EN 61010, IEC 61010

Scope of supply:

2 x test leads, approx. 1 m
2 x crocodile clips

Order No. **3034444**

Accessories

TL245A
Test lead set

Accessory information
- Test lead set with 4 mm safety technology
- PVC-insulated leads

Technical Data

Measurement category:	CAT III/1000 V
Pollution degree:	2
Safety cert.:	EN 61010, IEC 61010

Scope of supply:

2 x test leads, approx. 0,9 m

Order No. **3068215**

HV231-10A
High voltage probe

Functions
- High-voltage probe for AC and DC

Product information
- Voltage measurement up to 40 kV
- Usable with standard multimeter with 10 MΩ input impedance
- For measurements on energy limited circuits only

Technical Data

Input resistance:	1000 MΩ
Conversion factor:	1000:1
Max. voltage:	40 kV DC or AC, peak 28 kV AC RMS
Basic accuracy	DC V (1 kV…20 kV) ±1% DC V (20 kV…40 kV) ±2% AC V (1 kV…20 kV) (50/60 Hz) ±5%
Dimensions:	340 x 30 mm
Weight:	218 g

Scope of supply:

1 x HV231-10A
1 x user manual

Ordering Information:

Description	Order No.
HV231-10A	**3026875**

Accessories

CC-VP-7xx
Carrying Case
Material: Nylon, padded, Attachments, carrying strap
Suitable for VP-700 series
Internal dimensions: 280 x 80 x 45 mm

Order No. **3889931**

CC-ACDC
Carrying Case
Material: Nylon, carrying strap, belt loop
External dimensions: 300 x 120 x 60 mm

Order No. **2732643**

SV-U
Carrying Case
Material: Nylon, carrying strap, belt loop
External dimensions: 300 x 120 x 60 mm

Order No. **2733511**

VC3A
Carrying Case
Material: Nylon
External dimensions: 140 x 80 x 20 mm

Order No. **3099130**

VC30A
Carrying Case
Material: Imitation leather, belt loop
External dimensions: 200 x 80 x 45 mm

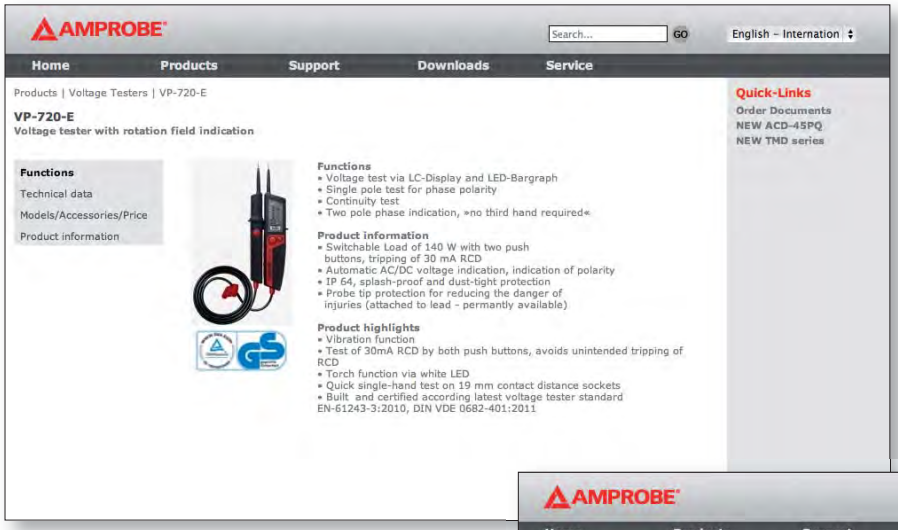
Order No. **3068280**

VC221B
Carrying Case
Material: Imitation leather, belt loop
External dimensions: 220 x 115 x 60 mm

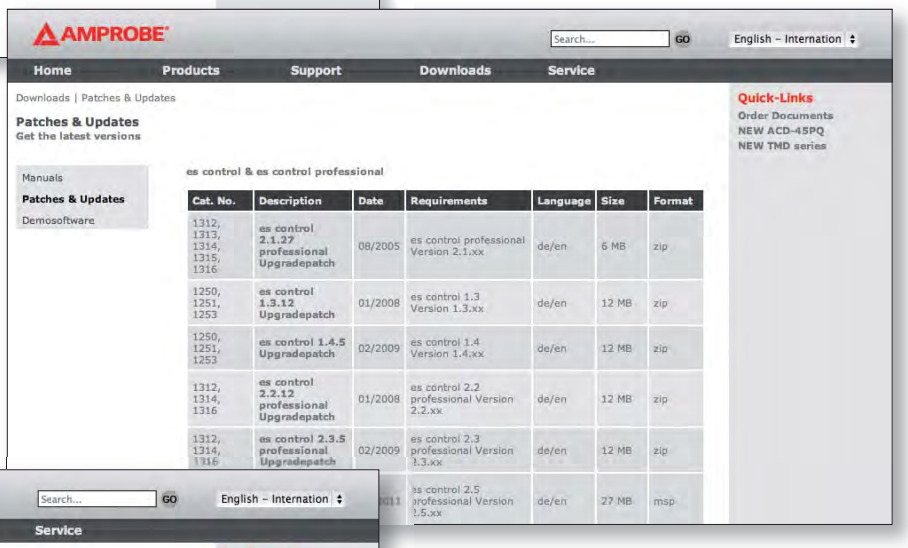
Order No. **3068271**

Fuses

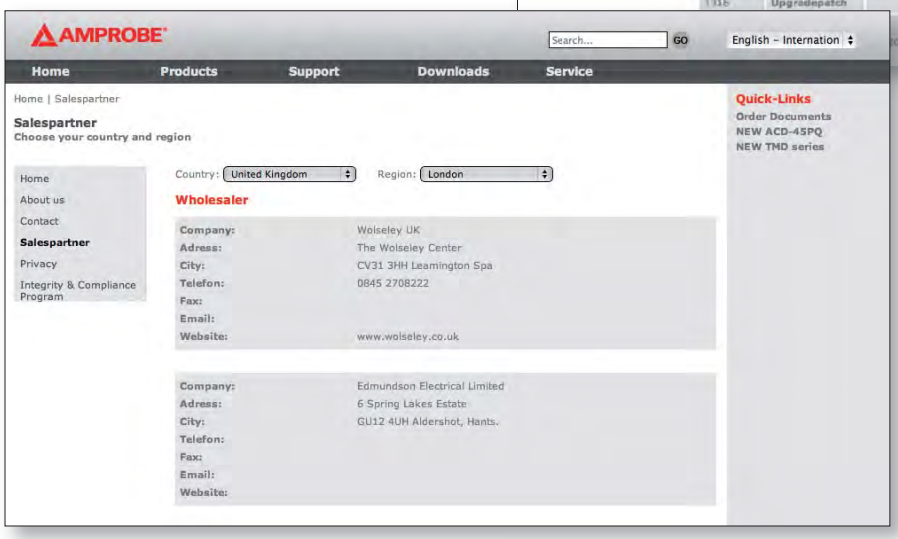
Description	Specifications	Order No.
FP100	(2x 10 A/1000 V)	**1990707**
FP125	(4x 0.1 A/250 V)	**1561550**
FP150	(4x 0.2 A/250 V)	**1561561**
FP160	(2x 10 A/600 V)	**1990718**
FP200	(2x 2 A/1000 V)	**2095180**
FP225	(4x 0.5 A/250 V)	**1561577**
FP300	(4x 0.315 A/1000 V)	**1990688**
FP375	(4x 0.25 A/500 V)	**1561610**
FP400	(4x 10 A/600 V)	**1561631**
FP425	(2x 20 A/600 V)	**1561646**
FP500	(4x 0.5 A/1000 V)	**1990695**
FP520	(2x 0.5 A/500 V)	**3157013**
FP600	(2x 15 A/600 V)	**1565777**
FP700	(2x 2 A/1500 V) for HD160C	**2637713**
FP900	(2x 200 mA/600 V)	**2278800**



Detailed product presentation



Software and manuals



Distributor selection

Notes

Amprobe® Test Tools offers a wide range of devices for testing and measuring electrical properties in various field applications. Primary products include Clamp Meters, Multimeters, Wire Tracers, Megohmmeters, Environmental and Voltage & Continuity testers.

Distributor:

AMPROBE TEST TOOLS EUROPE
BEHA-AMPROBE GmbH
In den Engematten 14 · 79286 Glottertal/Germany
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Specifications subject to change without notice

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

AMPROBE:

FP375 FP125 FP400 FP425 FP900 FP-200 FP-300 FP-160