

YOUR ADVANTAGE

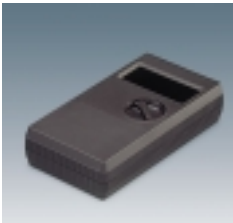
- These cases are ergonomic and easy to use.
- Prepared for mounting of digital or analogue display modules.
- Battery compartment with snap-in-mechanism for the quick change of batteries.
- With or without switch cap / slide switch cap, also for multimeters.
- High front end for the mounting of connectors.
- Recessed operating area for the protection of membrane keyboards and operating elements.

STANDARD COLOURS

Black, RAL 9005 resp. black brown, RAL 8022
Off-white, RAL 9002.
Please refer to colour chart on page 214.

MATERIAL

ABS (UL 94 HB).
Also available in other materials on request. Please refer to the specifications on pages 215-217.



ROBUST, MOBILE, HANDY

Successfully used cases for multiple and single measuring and for mobile data recording.

Available in five different types.

The boxes are easy to handle and easy to service.

The variety of boxes is so large that we are sure you will find a case to suit your specific requirements exactly.

APPLICATIONS

Useful hand-held-boxes for mounting of digital or analogical instruments. Versatile useable in the measuring and control technology, e.g. continuity checker and volt meter, field intensity meter, digital thermometers etc.

EMC

Cases marked with \neq are available with aluminium metallization on demand. The contact areas of top and bottom part are poor.

MODIFICATIONS AS PER CUSTOMER'S REQUIREMENTS

Machining on modern CNC-controlled machines.
Lacquering, Silk screen and tamper printing.
See pages 210-213.

DESIGN

Successfully used case for measuring instruments of handy pocket size. With recessed area for imprints or your logo. Cut-out section for LCD or analogical modules with active area up to 1.969 x 0.787". With battery compartment, accessible from the outside, for 9 V flat battery (PP3) or one 1.5 V baby cell (C) with contacts for soldering. Raised front area to accommodate plugs.



Battery compartment for one 9 V flat battery (PP3) or one 1.5 V baby cell (C) with contacts for soldering.

ASSEMBLY

Case parts are assembled by 4 self-tapping screws. Snap-in battery compartment lid.

VERSION I

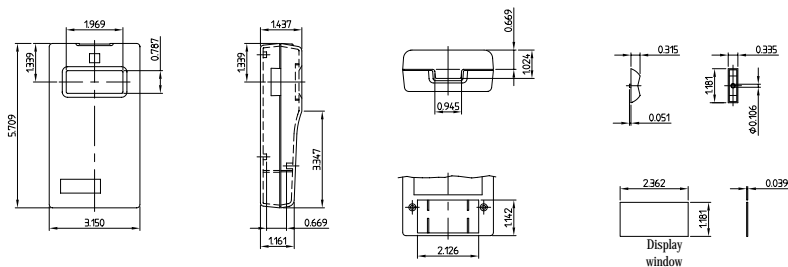
With lateral recess for rocker switch.

VERSION II

Without lateral recess.

Detailed drawing available on demand in dwg or dxf format.

⊕ ⊕ = Type of screw for case fixing: cross head



Max. size of PCB: base part 2.795 x 4.173", top part 2.835 x 4.173" (cutouts for pillars not taken into consideration)

⊕ H (PH1)

MODIFICATIONS AS PER CUSTOMER'S REQUIREMENTS

See pages 210-213.

CASE (Part-No. with \neq see EMC page 42)

Outside dimensions in inch Colour Version

L	W	H	Colour	Version
5.709	3.150	1.437/1.161	black	I
5.709	3.150	1.437/1.161	off-white	I
5.709	3.150	1.437/1.161	black	II
5.709	3.150	1.437/1.161	off-white	II

ACCESSORIES

Article	Colour	Version / Application
Switch cap	black	for rocker switch application
Switch cap	off-white	for rocker switch application
Cover plug	black	cover the screw holes in the bottom
Plug-in-contact	blue	for 1 x 9 V flat battery (PP3)
Display window	transparent	plexiglass
Adhesive foil	transparent	for fastening the display window

Part-No.

A 90 60 009 \neq

A 90 60 007 \neq

A 90 60 019 \neq

A 90 60 017 \neq

A 91 60 009

A 91 60 007

A 91 60 002

A 91 60 003

A 91 60 004

A 91 60 006

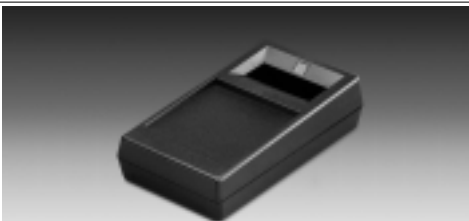
Reference: Suitable tilt foot bar see accessory on page 200.



Battery compartment for one 9 V flat battery (PP3) or one 1.5 V baby cell (C) with contacts for soldering.

VERSION I

With battery compartment for one 9 V flat battery (PP3) or one 1.5 V baby cell (C).



DESIGN

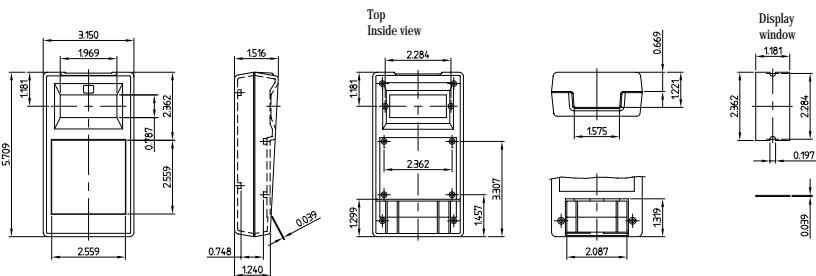
Small hand-held case with excellent design. With recessed area, e.g. for membrane keyboards, control elements. Cut-out section for digital and analogical modules with active area up to 1.969 x 0.787". The battery compartment is accessible from the outside. For 9 V flat battery (PP3) or 1.5 V baby cell (C) with contacts for soldering. Raised front area to accommodate plugs.

ASSEMBLY

Case parts are assembled by 4 self-tapping screws. Snap-in battery compartment lid.

Detailed drawing available on demand in dwg or dxf format.

⊕ ⊗ = Type of screw for case fixing: cross head



Max. size of PCB: base part 2.795 x 4.016", top part 2.795 x 4.173" (cutouts for pillars not taken into consideration)

⊕ H (PH1)

Part-No.	CASE (Part-No. with # see EMC page 42)				
	Outside dimensions in inch			Colour	Version
	L	W	H		
A 90.62.019 #	5.709	3.150	1.516/1.240	black	I
A 90.62.017 #	5.709	3.150	1.516/1.240	off-white	I
ACCESSORIES					
Article	Colour	Version / Application			
Cover plug	black	cover the screw holes on bottom			
Plug-in contact	blue	for 1 x 9 V flat battery (PP3)			
Display window	transparent	plexiglass			
Adhesive foil	transparent	for fastening the display window			

Reference: Suitable tilt foot bar see accessory on page 200.

MODIFICATIONS
AS PER
CUSTOMER'S
REQUIREMENTS

See pages 210-213.

DESIGN

Large exclusive hand-held case. With recessed area, e.g. for membrane key-boards, control elements. Cut-out section for digital and analogical modules with active area up to 2.559 x 0.906". Version with battery compartment either for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA), accessible from the outside. Raised front area to accommodate plugs.

ASSEMBLY

Case parts are assembled by 4 self-tapping screws. Snap-in battery compartment lid.



Version I with battery compartment for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA).

VERSION I

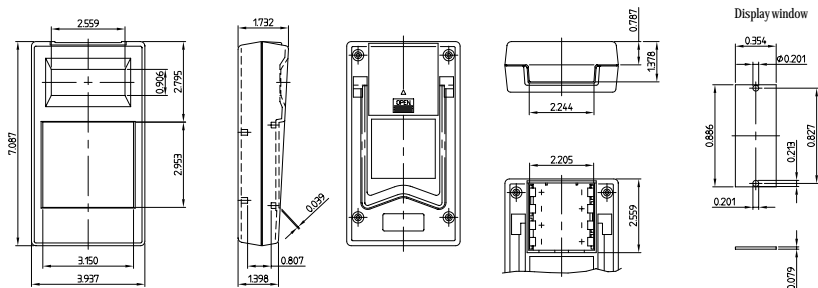
With battery compartment for two 9 V flat batteries (PP3) or four 1.5 V mignon cells (AA).

VERSION II

Without battery compartment.

Detailed drawing available on demand in dwg or dxf format.

⊕ ⊗ = Type of screw for case fixing: cross head



Max. size of PCB: top part 3.583 x 6.654", base part without battery compartment 3.583 x 6.614" or with battery compartment 3.583 x 4.291" (cutouts for pillars not taken into consideration)

⊕ Z (PZ1)

MODIFICATIONS AS PER CUSTOMER'S REQUIREMENTS

See pages 210-213.

CASE (Part-No. with # see EMC page 42)				
Outside dimensions in inch			Colour	Version
L	W	H		
7.087	3.937	1.732/1.398	black	I
7.087	3.937	1.732/1.398	off-white	I
7.087	3.937	1.732/1.398	black	II
7.087	3.937	1.732/1.398	off-white	II

ACCESSORIES

Article	Colour	Version / Application
Set of battery clips	tin plated	for 4 x 1.5 V mignon cells (AA)
Plug-in contact	blue	for 1 x 9 V flat battery (PP3)
Tilt foot bar	chrome plated	steel, for ergonomic canting
Display window	transparent	plexiglass
Adhesive foil	transparent	for fastening the display window

Part-No.

A 90 61 019 #

A 90 61 017 #

A 90 61 119 #

A 90 61 117 #

A 91 61 001

A 91 60 003

A 93 61 009

A 91 61 004

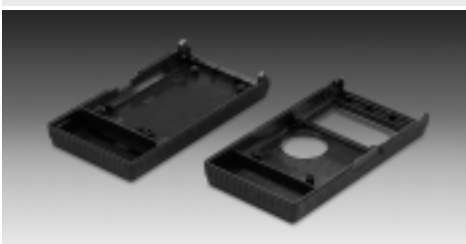
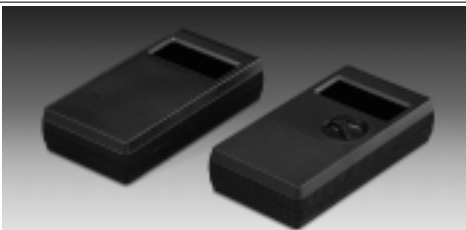
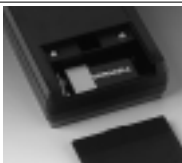
A 91 61 005

DESIGN

Clearly styled hand-held case with ridged side areas affording a firm grip. Suitable for two-layer PCB mounting. Version I with recessed area 5.606 x 2.795" for membrane keyboards or imprinting. Cut-out section for digital and analogical modules with active area up to 2.362 x 0.984". Battery compartment for 9 V flat battery (PP3), accessible from the outside.

ASSEMBLY

Case parts are assembled by 2 screws. Removable and plug-in type rear panel.



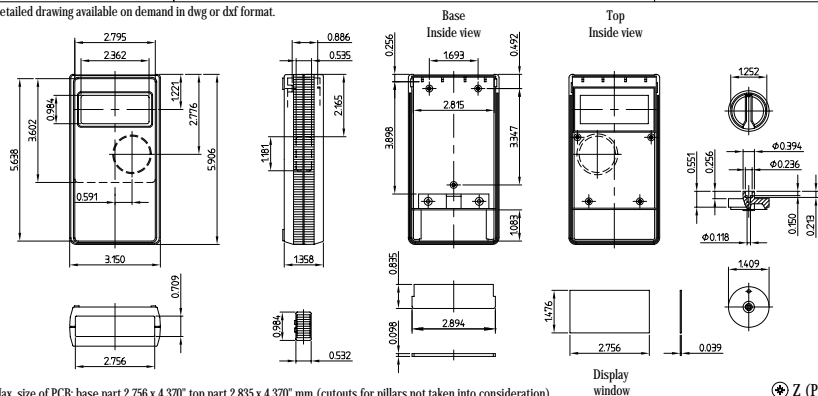
VERSION I

HAND-HELD-BOX G.
Without lateral recess.
With removable front panel.

VERSION II

HAND-HELD-BOX K.
Special type for multi-meters.
With lateral recess for slide switch and borehole for knob on the upper side.
With removable front panel.

Detailed drawing available on demand in dwg or dxf format.



Max. size of PCB: base part 2.756 x 4.370" top part 2.835 x 4.370" mm (cutouts for pillars not taken into consideration)

⊕ Z (PZI)

Part-No.	CASE (Part-No. with † see EMC page 42)		Colour	Version	
	Outside dimensions in inch				
	L	W	H		
A 90 63 011 †	5.906	3.150	1.358	black brown	I
A 90 63 021 †	5.906	3.150	1.358	black brown	II
ACCESSORIES					
Article	Colour	Version / Application			
A 91 63 001	Switch knob	black brown			
A 91 63 003	Slide switch cap	black brown	slide dimensions 0.118 x 0.118"		
A 91 60 003	Plug-in contact	blue	for 1 x 9 V flat battery (PP3)		
A 91 63 004	Display window	transparent	plexiglass		
A 91 63 005	Adhesive foil	transparent	for fastening the display window		

**MODIFICATIONS
AS PER
CUSTOMER'S
REQUIREMENTS**

See pages 210-213.