

# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



SCK measuring module for monitoring photovoltaic systems, 1 x voltage measurement up to 1500 V DC, 1 x analog output (2 ... 10 V)

## Commercial Data

Item number	2903591
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	C447
Product Key	CK4D12
Catalog Page	Page 243 (C-5-2019)
GTIN	4046356752398
Weight per Piece (including packing)	184.7 g
Weight per Piece (excluding packing)	172.5 g
Customs tariff number	90303370
Country of origin	DE

# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

## Technical Data

### Product properties

Product type	Voltage transducer
Product family	SOLARCHECK

### Insulation characteristics

Pollution degree	2
------------------	---

### Electrical properties

Protective circuit	Surge protection; 33 V suppressor diode
--------------------	---

### Supply

Nominal supply voltage	24 V DC -10 % ... +25 % (or via SSCK-M-I-8S-20A)
Supply voltage range	21.6 V DC ... 30 V DC
Own current consumption	8 mA (typical)
	65 mA (maximum)

### Input data

#### Measurement

Number of inputs	1
Input voltage range	0 V DC ... 1500 V DC
	0 V DC ... 1000 V DC (UL)
Input resistance of voltage input	2x 20 M $\Omega$
Connection method	Screw connection
Impulse form	DC voltage
Temperature coefficient, typical	< 0.01 %/K
Maximum transmission error	$\pm$ 1 % (after additional tuning (valid for 100 - 1,500 V DC))

### Output data

#### Signal: analog

Voltage output signal	2 V DC ... 10 V DC
Load	10 k $\Omega$
Cable type	Twisted, shielded

### Connection data

Connection method	Screw connection
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Tightening torque	0.5 Nm ... 0.6 Nm

### Dimensions

Width	22.5 mm
-------	---------

# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

Height	102 mm
Depth	128.5 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m
Permissible humidity (operation)	≤ 95 % (non-condensing)

## Approvals

### CE

Certificate	CE-compliant
-------------	--------------

### UL, USA/Canada

Identification	508 Listed
----------------	------------

### UL, USA

Identification	1741 Recognized
----------------	-----------------

## EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2
Note	When being exposed to interference, there may be minimal deviations.
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4

## Standards and regulations

Standards/regulations	EN 61010-1
-----------------------	------------

## Mounting

Mounting type	DIN rail: 35 mm
	DIN rail mounting

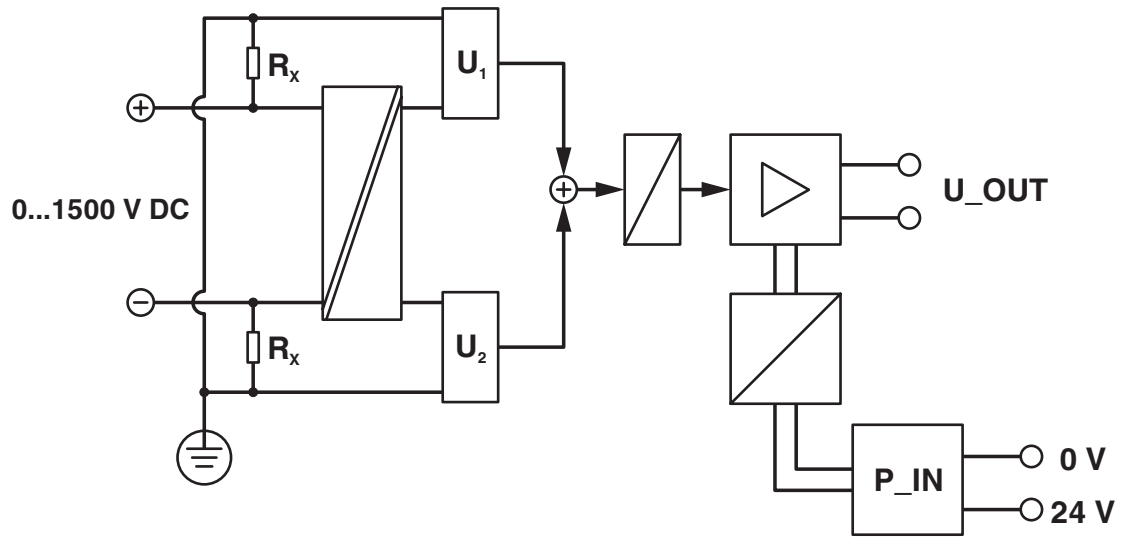
# SCK-M-U-1500V - PV string monitoring module

2903591

<https://www.phoenixcontact.com/us/products/2903591>

## Drawings

Block diagram



# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

## Approvals



**UL Recognized**

Approval ID: FILE E 325209



**EAC**

Approval ID: RU\*DE.\*08.B.01536/19



**UL Listed**

Approval ID: FILE E 140324



**cUL Listed**

Approval ID: FILE E 140324

# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

## Classifications

### ECLASS

ECLASS-11.0	27210125
ECLASS-12.0	27210125
ECLASS-13.0	27210125

### ETIM

ETIM 8.0	EC002477
----------	----------

### UNSPSC

UNSPSC 21.0	39121000
-------------	----------

# SCK-M-U-1500V - PV string monitoring module



2903591

<https://www.phoenixcontact.com/us/products/2903591>

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)