

SCK-M-8S-20A-R - PV string monitoring module

2905168

<https://www.phoenixcontact.com/us/products/2905168>



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, 8 x current measurement up to 20 A, 1 x digital input, interface to SCK communication module, first device generation communication protocol

Commercial data

Item number	2905168
Packing unit	1 pc
Sales key	NULL
Product key	CMMD11
GTIN	4046356920155
Weight per piece (including packing)	295.1 g
Weight per piece (excluding packing)	295.1 g
Customs tariff number	90303370
Country of origin	DE

SCK-M-8S-20A-R - PV string monitoring module

2905168

<https://www.phoenixcontact.com/us/products/2905168>



Technical data

Product properties

Product type	Current measuring transducer
Product family	SOLARCHECK
Insulation characteristics	
Pollution degree	2

Electrical properties

Protective circuit	Surge protection; 33 V suppressor diode
Maximum transmission error	< 1 % (of final value)

Supply

Supply voltage range	via the SOLARCHECK communication module
Own current consumption	40 mA (typical)
	120 mA (maximum)

Input data

Signal: digital

Description of the input	Digital input
Available input sources	floating switch contacts
Cable length	≤ 30 m

Measurement

Number of inputs	8
Input current range	0 A DC ... 20 A DC
LSB: Current	20 mA
Overload capacity	5 x I_N
Temperature coefficient, typical	0.1 %/K
Maximum transmission error	± 1 % (From the measuring range final value)

Connection data

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

Interfaces

Data: Data interface to SCK-C-MODBUS

Transmission length	≤ 300 m (0.14 mm ²)
	≤ 500 m (1.5 mm ²)
Protocols supported	Proprietary

SCK-M-8S-20A-R - PV string monitoring module

2905168

<https://www.phoenixcontact.com/us/products/2905168>



Dimensions

Item dimensions

Width	22.5 mm
Height	102 mm
Depth	128.5 mm

Circular conductor

Diameter	9.5 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
-------------	--------------

EMC data

Electromagnetic compatibility	Conformance with EMC directive
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.

Noise emission

Standards/regulations	EN 61000-6-4
-----------------------	--------------

Mounting

Mounting type	DIN rail: 35 mm
	DIN rail mounting

SCK-M-8S-20A-R - PV string monitoring module

2905168

<https://www.phoenixcontact.com/us/products/2905168>



Classifications

ETIM

ETIM 9.0

EC002475

UNSPSC

UNSPSC 21.0

39121000

SCK-M-8S-20A-R - PV string monitoring module

2905168

<https://www.phoenixcontact.com/us/products/2905168>



Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.	

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
-------------------------------------	----------------------

Phoenix Contact 2025 © - 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