

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

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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



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Technical data

Product properties

Product type	Current measuring transducer
Product family	SOLARCHECK

Insulation characteristics

Pollution degree	2
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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

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Dimensions

Item dimensions

Width	22.5 mm
Height	102 mm
Depth	128.5 mm

Circular conductor

Diameter	9.5 mm
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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
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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
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Mounting

Mounting type	DIN rail: 35 mm
	DIN rail mounting

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Classifications

ETIM

ETIM 9.0	EC002475
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UNSPSC

UNSPSC 21.0	39121000
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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)
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