

# SCK-M-I-8S-20A - PV string monitoring module



2903241

<https://www.phoenixcontact.com/us/products/2903241>

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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, interface to voltage measuring module

## Commercial data

Item number	2903241
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C447
Product key	CMMD11
GTIN	4046356729703
Weight per piece (including packing)	322.9 g
Weight per piece (excluding packing)	300 g
Customs tariff number	90303370
Country of origin	DE

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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

Maximum power dissipation for nominal condition	1.15 W
Protective circuit	Surge protection; 33 V suppressor diode

### Supply

Supply voltage range	via the SOLARCHECK communication module
Own current consumption	43 mA (typical)
	50 mA (maximum)

### Input data

#### Signal: digital

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

#### Signal: analog

Description of the input	Analog input
Voltage input signal	0 V ... 10 V

### Measurement

Number of inputs	8
Input current range	0 A DC ... 20 A DC (UL: 0 A DC...25 A DC)
Reverse current detection	-1 A DC ... 0 mA
LSB: Current	20 mA
Overload capacity	5 x I <sub>N</sub>
Temperature coefficient, typical	0.02 %/K (T <sub>K20</sub> )
Maximum transmission error	± 1 % (From the measuring range final value)

### Connection data

Connection method	Screw connection
Conductor cross-section rigid	0.2 mm² ... 2.5 mm²
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 12
Tightening torque	0.5 Nm ... 0.6 Nm

### Interfaces

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Data: Data interface to SCK-C-MODBUS

Transmission length	≤ 300 m (0.14 mm <sup>2</sup> )
	≤ 500 m (1.5 mm <sup>2</sup> )
Protocols supported	Proprietary

## 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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UL, USA/Canada

Identification	508 Listed
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UL, USA

Identification	1741 Recognized
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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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## Standards and regulations

Standards/regulations	EN 61010-1
	EN 61010-2-30

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## Mounting

Mounting type	DIN rail: 35 mm
	DIN rail mounting

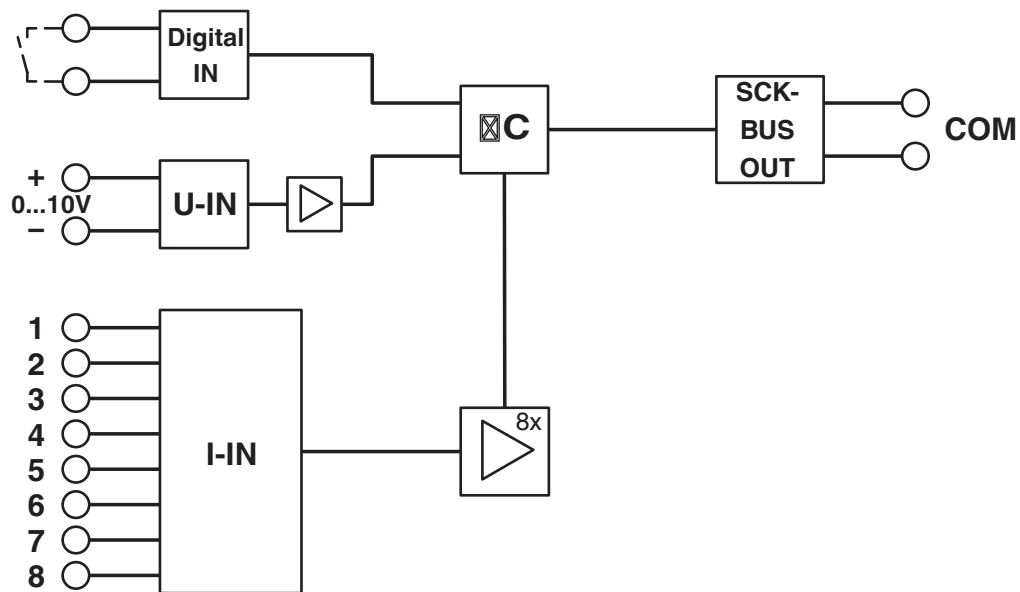
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## Drawings

Block diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903241>



**UL Recognized**

Approval ID: FILE E 325209



**EAC**

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



**UL Listed**

Approval ID: E140324



**cUL Listed**

Approval ID: E140324

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## Classifications

### ECLASS

ECLASS-13.0	27210123
ECLASS-15.0	27210123

### 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)
SCIP	fb391da0-3fbe-49f0-8eaa-a6224a23c97c

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