

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



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 |

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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 |

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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 |

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Classifications

ECLASS

ECLASS-15.0

27210123

ETIM

ETIM 9.0

EC002475

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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