

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



2903591

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

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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	CMMD12
GTIN	4046356752398
Weight per piece (including packing)	184.2 g
Weight per piece (excluding packing)	172.5 g
Customs tariff number	90303370
Country of origin	DE

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Technical data

Product properties

Product type	Voltage transducer
Product family	SOLARCHECK

Insulation characteristics

Pollution degree	2
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Electrical properties

Protective circuit	Surge protection; 33 V suppressor diode
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Supply

Nominal supply voltage	24 V DC -10 % ... +25 % (or via S5CK-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 (CAT III)
	0 V DC ... 1000 V DC (UL)
Input resistance of voltage input	2x 20 M Ω
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 Ω
Cable type	Twisted, shielded

Connection data

Connection method	Screw connection
Stripping length	8 mm
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

Dimensions

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Width	22.5 mm
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
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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

Mounting

Mounting type	DIN rail: 35 mm
	DIN rail mounting

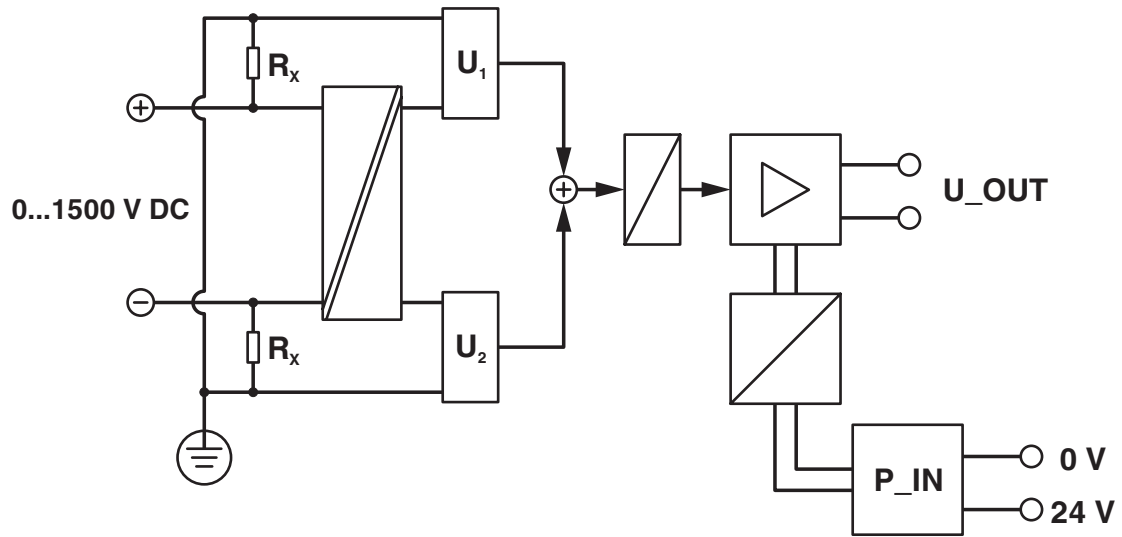
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Drawings

Block diagram



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Approvals

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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



UL Recognized

Approval ID: FILE E 325209



cUL Listed

Approval ID: E140324



UL Listed

Approval ID: E140324

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Classifications

ECLASS

ECLASS-13.0	27210125
ECLASS-15.0	27210125

ETIM

ETIM 10.0	EC002477
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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.)	N,N-dimethylacetamide(CAS: 127-19-5)
	Lead(CAS: 7439-92-1)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	68c42f43-49d8-452d-b48c-8eb78674784b

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