

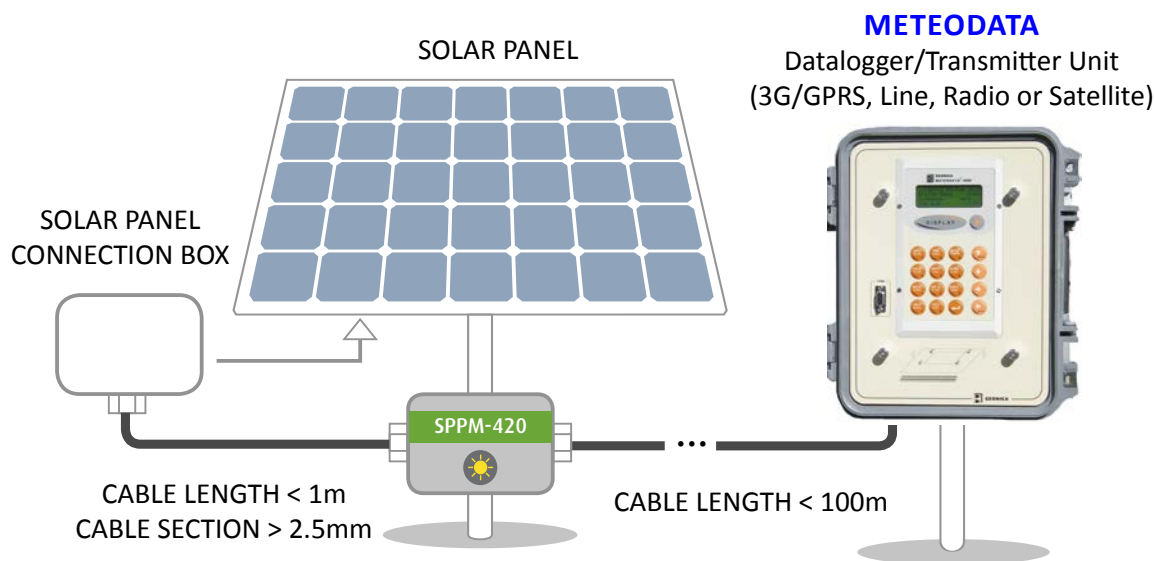
# Model SPPM-420

## Solar Panel Power Monitor with 4-20mA Output Suitable for Bifacial Solar Panels



**SPPM-V420** is an electronic module for the measurement, conditioning, isolation and transmission of VOC signal (typical measurement range: 40V) for reference solar panels.

**SPPM-I420** is an electronic module for the measurement, conditioning, isolation and transmission of ISC signal (typical measurement range: 10A) for reference solar panels.



### TECHNICAL SPECIFICATIONS

#### GENERAL

Output Signal:	4-20mA
Accuracy:	Better than 0.2% of selected range

#### OPERATION

Supply voltage:	8.0...35 VDC
Isolation voltage:	1.5 kVAC / 50 VAC
Response time:	1...60 s (programmable)
Warm-up time:	30 s
Programming:	Loop Link & HART
EMC immunity influence:	< ±0.1% of span
Cable resistance per wire:	5 Ω (max.) up to 50 Ω per wire is possible with reduced measurement accuracy
Mounting:	Mechanical kit for mounting on mast.

#### ENVIRONMENTAL

Operating temperature:	-40°C to +85°C
Relative humidity:	< 95% RH (non-cond.)
Protection degree:	IP66
Pressure compensation element included	

#### SIGNAL

Signal / Noise ratio:	Min. 60 dB
$I_{sc}$ Input / Output signal range:	0 to 14A (4 to 20 mA)
$V_{oc}$ Input / Output signal range:	0 to 60V (4 to 20 mA)
Signal dynamics, input:	22 bit
Signal dynamics, output:	16 bit
Effect of supply voltage change:	< 0.005% of span / VDC