

Sensor Signal Converter MC-11 Converter



Features

- Analogue sensor interface (V)
- 4-20mA | 0-1600 W/m² Irradiance
- Optional USB controller and EKO sense control software to change settings

The new 4...20mA converter called "MC-11" is a digital signal conditioner to convert the Voltage output of a Solar radiation sensor into a 4...20mA current output. The converter can be used with all passive EKO radiometers or any other mV sensor to be connected to data loggers or inverters with a 4...20mA input channel. By using the signal conditioner the sensor cable can be easily extended over long distances without any signal loss or potential electromagnetic interference in noisy industrial environments.

For easy conversion the converter output for the solar sensor can be set to: 4-20mA = 0 - 1600 W/m². In combination with a solar sensor the sensitivity factor of the solar sensor will be preset to the converter. With the optional USB controller and EKO Sense software (Multiple languages) the converter settings can be freely changed. This tool will be needed in case the sensor sensitivity might need to be changed after a periodical solar sensor re-calibration. It has robust input/output screw terminals, which can be easily connected to the signal cable that leads to the measurements system at the installation site.

Specifications

Characteristics	Specification
Range settings	0-1600 W/m ² = 4-20mA (or adjusted on request)
Input voltage range	0 to 100 mV
Resolution	<5μV
Input impedance	>10 MΩ
Temperature dependence	<0.2% (-20 to 50°C)
Non-linearity	< 0.1%
Updating time / Response time	<1s
W x L x H	Diameter 45 mm / h = 23mm
Operating temperature range	-40°C to +80°C
Ingress protection rating	-
Supply voltage	DC 12-24 V ±10%
Power consumption	0.08 ... 0.75 W