



Sensor with polycrystalline cell.

Designed to measuring the solar radiation intensity of PV panels.

Two grommets provide a secure extension of the bus (1x for the connection to the Solar Monitor unit and 1x for the connection of the PV panel temperature sensor). Resistant to weathering. Designed for mounting on mounting system modules.

By connecting an irradiance sensor to the Solar Monitor unit you get other important values. You can perform energy audits, calculate the potential power and compare it with the real one. It may also serve to trigger other processes, alarms, etc.

**Maximum Ratings ( $T_A = 25\text{ }^\circ\text{C}$ )**
**Grenzwerte**

Parameter Bezeichnung	Symbol Symbol	Values Werte	Unit Einheit
Operating and storage temperature range Betriebs- und Lagertemperatur	$T_{op}; T_{stg}$	-40 ... 100	$^\circ\text{C}$
Reverse voltage Sperrspannung	$V_R$	32	V
Total power dissipation Verlustleistung	$P_{tot}$	150	mW

**Characteristics ( $T_A = 25\text{ }^\circ\text{C}$ )**
**Kennwerte**

Parameter Bezeichnung	Symbol Symbol	Values Werte	Unit Einheit
Spectral sensitivity Fotoempfindlichkeit ( $V_R = 5\text{ V}$ , standard light A, $T = 2856\text{ K}$ )	S	80	nA/lx
Photocurrent Fotostrom ( $E_v = 1000\text{ lx}$ , Std. Light A, $V_R = 5\text{ V}$ )	$I_p$	80 ( $\geq 50$ )	$\mu\text{A}$
Wavelength of max. sensitivity Wellenlänge der max. Fotoempfindlichkeit	$\lambda_{S\text{ max}}$	850	nm
Spectral range of sensitivity Spektraler Bereich der Fotoempfindlichkeit	$\lambda_{10\%}$	400 ... 1100	nm
Radiant sensitive area Bestrahlungsempfindliche Fläche	A	7.02	$\text{mm}^2$
Dimensions of radiant sensitive area Abmessung der bestrahlungsempfindlichen Fläche	L x W	2.65 x 2.65	mm x mm
Half angle Halbwinkel	$\varphi$	$\pm 60$	$^\circ$
Dark current Dunkelstrom ( $V_R = 10\text{ V}$ )	$I_R$	2 ( $\leq 30$ )	nA
Spectral sensitivity of the chip Spektrale Fotoempfindlichkeit des Chips ( $\lambda = 850\text{ nm}$ )	$S_{\lambda\text{ typ}}$	0.62	A / W

**Relative Spectral Sensitivity  
Relative spektrale Empfindlichkeit**

$$S_{rel} = f(\lambda)$$

