Comparison between the New and Old Silicon Irradiance Sensors

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Change Note for Digital Si Sensors

Summary	Si Sensors from October 2017	Si Sensors before October 2017
Measuring Range Irradiance	0...1,500 W/m²	Different per type
Measurement Uncertainty[A]	5 W/m² ± 2.5% from reading	5 W/m² ± 2.5% from reading
Measuring Range Temperature	-40...+90°C	Different per type
Measurement Uncertainty	Up to 1.3 K[B]	Up to 2.5 K

[A] Not valid for Si-mV-85 respectively Si-02 and for Si-mV-85(-Pt100 / -Pt1000) respectively Si-0(-Pt100 / -Pt1000) without external temperature compensation.
[B] Refer to data sheet for more detailed information.

Output Signal		Si Sensors from October 2017	Si Sensors before October 2017
100 mV	**Type**	**Si-mV-85(-Pt100/-Pt1000)**	**Si-02(-Pt100/-Pt1000)**
	Irradiance	0...appr. 85 mV for 0...1,500 W/m²	0...appr. 80 mV for 0...1,400 W/m²
	Temperature	Pt100 or Pt1000	Pt100 or Pt1000
2 V	**Type**	**Si-V-1.5TC(-T)**	**Si-01TC(-T)**
	Irradiance	0...1.5 V for 0...1,500 W/m²	0...1.4 V for 0...1,400 W/m²
	Temperature	0...2 V for -40...+90°C	0...2 V for -123.5...+76.5°C
10 V	**Type**	**Si-V-10TC(-T)**	**Si-13TC(-T)**
	Irradiance	0...10 V for 0...1,500 W/m²	0...10 V for 0...1,300 W/m²
	Temperature	0...10 V for -40...+90°C	0...10 V for -26.1...+89°C
20 mA	**Type**	**Si-I-420TC(-T)**	**Si-420TC(-T)**
	Irradiance	4...20 mA for 0...1,500 W/m²	4...20 mA for 0...1,200 W/m²
	Temperature	4...20 mA for -40...+90°C	4...20 mA for -123.5...+76.5°C

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Measurement Uncertainty	5 W/m² ± 2.5% from reading	5 W/m² ± 2.5% from reading
Measuring Range Temperature	-40...+90°C	-40...+90°C
Measurement Uncertainty	1 K (-35...+80°C)	1 K (-35...+80°C)

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