

**Designed especially  
for commercial rooftop  
PV installations**



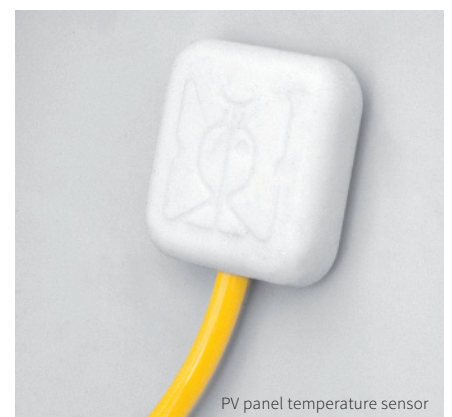
**Measures incoming  
solar irradiance and  
back panel temperature**



**Kipp & Zonen quality,  
based on  
100 years of experience**

Did you know that it pays off to monitor the performance of your rooftop PV installation? When you know exactly what the incoming solar radiation is, and the panel temperature, you know if you're getting the most out of your installation. Due to the stability of the design, recalibration is not needed for 2 years.

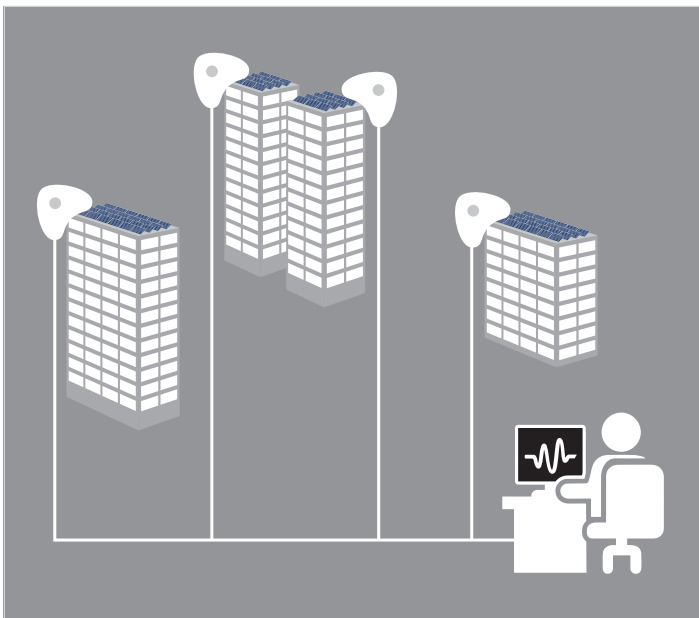
Monitor the Return On Investment of your rooftop PV installation professionally with rt1.



PV panel temperature sensor



# rt1 rooftop PV monitoring made easy



## The rt1 rooftop sensor:

- outperforms reference cells
- is very rugged, stable and reliable
- measures the real solar irradiance from dawn till dusk
- has a soiling resistant design, for low maintenance
- is extremely simple to mount on a corner of a PV panel
- can be easily removed for recalibration or service
- also fits on the side or top with a clamp-on adapter
- comes with a Kipp & Zonen calibration certificate



**rt1** is a small, fully weatherproof duo-sensor that independently measures the incoming solar irradiance and the back panel temperature. Thanks to this included back panel temperature sensor you collect all the data you need to monitor the performance of your installation - all in digital Modbus® format. Thanks to the unique design you can easily fix it to your PV panel without the need for any tools.

**“If you don’t measure accurately, you don’t know what you’re missing.”**

### Technical specifications

Irradiance	0 to 2000 W/m <sup>2</sup>
Precision/resolution	1 W/m <sup>2</sup>
Spectral range	400 to 1100 nm
Non-stability (change/year)	< 1 %
Non-linearity (0 to 1000 W/m <sup>2</sup> )	< 1 %
PV panel temperature	-20 to +100 °C, ± 1 °C
Calibration	Against traceable reference pyranometer
Signal connections	1 - RS-485 Modbus® to host 2 - PV panel temperature sensor
Voltage range	5 to 30 VDC
Power consumption maximum	60 mW
Ambient operating temperature	-40 to +80 °C
Recommended calibration interval	2 years
Standard warranty	2 years