

Net radiometer



- ▶ Net radiation measurement. Net between the radiation coming from the sky and radiation from the ground (reflected and emitted) within 0,3÷50 µm wave band
- ▶ Based on thermopile technology, assuring fast response time and low sensibility to the wind speed which is the main issue for other technologies as “black-body” radiometers
- ▶ Versions with µV output and 4÷20 mA
- ▶ Accessories for RS485-Modbus RTU output from DPA240 model

Net radiometers are sensors for measuring net radiation, i.e. the balance between the incoming sun and sky radiation and the ground-reflected short-wave and ground-emitted long-wave radiation. The primary sensitive element is a high sensitivity thermopile.

Technical Specifications

PN	DPA240	DPA840
		
Output	µV/W/m ²	0/4÷20 mA
Power supply	-	10÷30 Vac/dc
Power consumption	-	<0,4 W
Max. load	-	300 Ohm
EMC	-	EN 61326-1: 2013
Range	-1500÷1500 W/m ²	-150÷1500 W/m ²
Cable	L. = 10 m	7 pin IP65 watertight connector
Installation (on Ø 50 mm pole)	DYA031 bar + DYA049 collar	DYA049 collar
Calibration certificate	Included	Not included (SVICA4101)

Common Technical Specifications

Pyranometer	Principle	Thermopile
	Spectral range	0,3÷50 µm
	Accuracy	5% daily

General Information	Housing	Plated brass and Aluminum
	Recalibration	Every 2 years
	Protection grade	IP66
	Operative Temperature	-40÷80°C
	Compatibility with data loggers	M-Log (ELO008), R-Log (ELR515.1), E-Log, A-Log using ALIEM module

Accessories

	DYA049	Mast-mounting device for Ø 45-65 mm pole
	DYA031	Arm for fixing DPA240 to pole 45÷65 mm diameter. DYA049 required
	DWA505	Cable L. = 5 m for DPA840
	DWA510	Cable L. = 10 m for DPA840
	DWA525	Cable L. = 25 m for DPA840
	DWA526	Cable L. = 50 m for DPA840
	DWA527	Cable L. = 100 m for DPA840
	MG2251	7 pin free female connector for DWA5xx cable
	DPA291	Spare part: domes for net radiometer (n. 5 couples)
	DPA293	Spare part: salt cartridge
	DEA420.1 DEA420.2	Signal amplifier for Pyranometers. Output: 4÷20 mA Programmable pyranometer sensitivity ($\mu\text{V}/\text{Wm}^2$) Power supply 10÷30 Vac/dc For more technical information, see MW9008 catalogue
	MDMMA1010.1	Same features as DEA420.1 but: Output: RS-485 Modbus-RTU
	SVICA4101	Calibration certificate ISO9001 type (Net radiation)