Luxmeter and PAR radiation sensor

- Photosynthetic Active radiation sensor to measure the quantity of radiation, in the specific wave-bande, used by the vegetation to activate their photosyntesy process (DPA008)
- IP66 lux sensor for outdoor measurements of illuminance intensity in lx (ESR003)
- Wide measurement range, up to 150.000 lx for outdoors (ESR003)
- Accessories for 4÷20 mA and RS-485 signal output

Luxmeter probes to measure illuminance in long term outdoor applications according to the response of the human eye (Vlamba CIE curve). The sensing element is a photodiode with optical filter with interferential deposition in order to improve spectral transmission. DPA008 radiometer with broad spectral response measures the atmospheric irradiance in the PAR (Photosynthetic active radiation) spectral range. It has an optical-quality glass dome optimizing the cosine response.
To convert the signal output to 4÷20 mA or Modbus, it is possible to use STB or MSB converters.

Technical Specifications

PN	DPA008	ESR003.1
		
Measurement	PAR	Lux
Principle	Photodiode	Photodiode
Spectral range	Photosynthetically Photon Flux Density 400÷700nm	Vlamba CIE curve
Accuracy	7,7% spectral error	±3%
Measuring range	0÷3000 µmol/s/m^2	0÷150 KLux
Response time	< 1 ms	0,1 s.
Linearity	< 0,2%	< 1%
Recalibration	-	Every 2 years
Output	0÷10 mV	0÷300 mV
Power supply	7÷15 Vdc	7÷15 Vdc
Consumption	5 mA	5 mA
Connector	Free wires (4-wire)	Free wires (4-wire)

PN	DPA008	ESR003.1
Housing	Anodized aluminum	Anodized aluminum
Protection	IP65	IP65
Cable	L. = 5 m	L. = 10 m
Installation (on Ø 45÷65 mm. pole)	DYA032+DYA049	DYA032+DYA049
Calibration certificate	NA	DZC201.S included
Data logger compatibility	M-Log (ELO008) R-Log (ELR515) E-Log A-Log (using ALIEM module)	M-Log (ELO008) R-Log (ELR515) E-Log A-Log (using ALIEM module)

Accessories

	DYA032	Horizontal arm for fixing lux sensors to DYA049 collar
	DYA049	Mast-mounting collar for Ø 45÷65 mm pole
	SVICA6001	ISO9001 calibration certificate for Lux sensors
	DEA420.1 DEA420.2	STB– Signal Transducer Box Signal converter for PAR and Lux sensors Output: 4÷20 mA Power supply 10÷30 Vac/dc For more technical information, see MW9008 catalogue
	MDMMA1010.1	MSB– Modbus Sensor Box Same features as DEA420.1 but: Output: RS485 Modbus-RTU

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