Environmental Monitoring Solutions

SOLAR RADIATION (UV-A, UV-B)

UV-A, UV-B radiometers



- Good answer to the UV-A and UV-B band curves
- Calibration made under the sun for a better response to sunshine and atmospheric conditions
- Traceability to ARPA Ivrea (Italy) laboratory (ISO17025)
- Very good cosine response
- Broadband spectral response
- Thin film metal interference filter technology and specially developed silicon photodiode according to WMO requirements
- 4...20 mA analogue output and 10...30 V AC/DC power supply

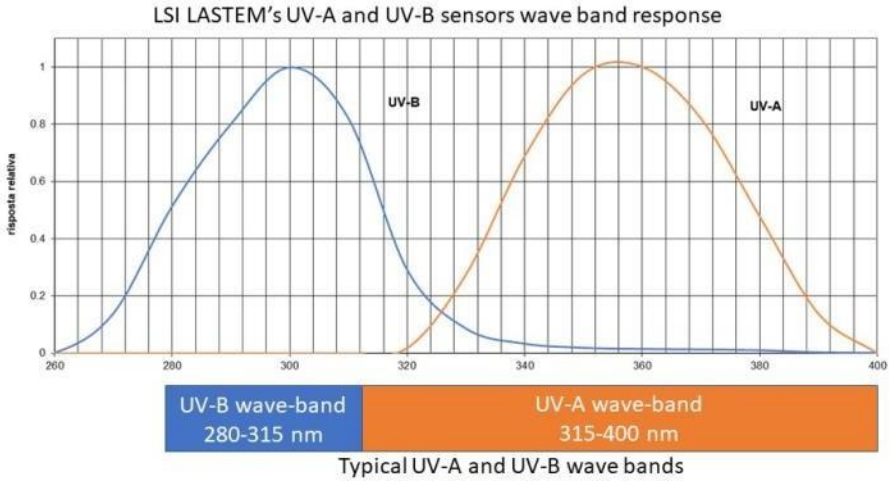
Radiometer with broad spectral response for measuring of atmospheric irradiance in the UV-A and UV-B spectrum. The sensing element is a photodiode with optical filter with interferential deposition to improve spectral transmission. A high-quality dome and diffuser improve cosine response for radiation coming from lower angles.

Technical Specifications

PN		DPA817	DPA822
UV sensor	Measurement	UV-A	UV-B
	Principle	Photodiode with high sensitivity in UV range	
	Spectral range	315...400 nm	280...315 nm
	Expanded accuracy	18% daily in clear sky	22% daily in clear sky and 310-330 DU at 45° latitude (Dobson unit = Ozone column)
	Cosine error	±8% for incidence angles < 60° (see fig. at pag.2)	
	Calibration	Under sun	Under sun
	Measuring range	0...70 W/m^2	0...5 W/m^2
General Information	Output	4...20 mA	
	Power supply	10...30 V AC/DC	
	Max Load	300 Ohm	
	Power consumption	0.7 W	
	Recalibration	Every 2 years	
	Housing	Anodized aluminum	
	Cable	Not included. See accessories	
	Installation (on Ø 45...65 mm pole)	DYA034 arm+DYA049 collar	
	EMC	EN 61326-1: 2013	
	Grado di protezione	IP66	
	Data logger compatibility	E-Log, Alpha-Log	

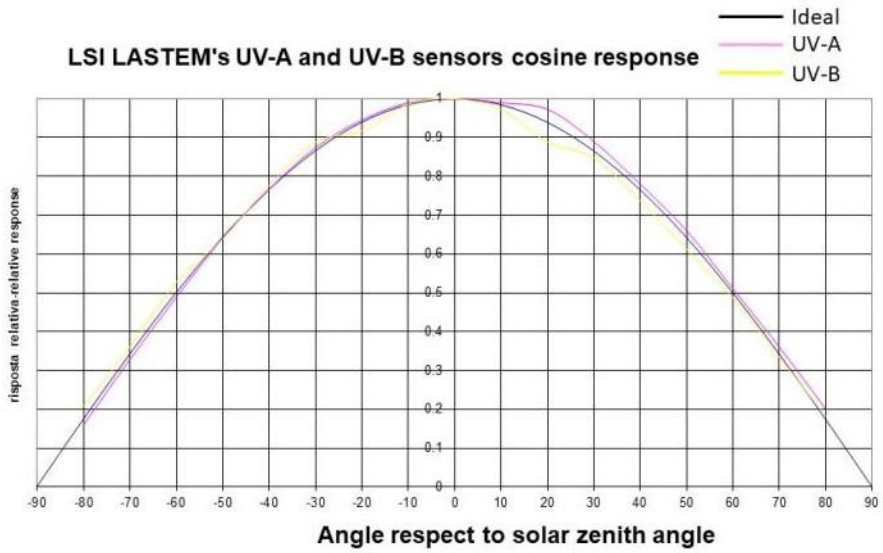
Accessories

	DYA049	Mast-mounting device for Ø 45...65 mm pole
	**DYA034**	Arm for fixing DPA817-822 to DYA049 collar
	**DWA405A**	Cable L=5 m
	DWA410A	Cable L=10 m
	DWA425A	Cable L=25 m
	DWA426A	Cable L=50 m
	DWA427A	Cable L=100 m



Typical UV-A and UV-B wave bands

LSI LASTEM UV-A and UV-B sensors have a good response to the typical wave bands of the UV radiation.



LSI LASTEM UV-A and UV-B sensors have a good response to the sun declination during the day (cosine response).

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