

UV online sensor QSO 3

for permanent measurement
of UV intensities

Features

- Measurement of the relative UV intensity
- DC 0...10 V measuring signal proportional to the UV irradiance
- Air purging connection

Advantages

- Designed for permanent measurement of intensive UV irradiation
- Robust construction made of UV-resistant materials
- Amplification factor of the measuring signal is adjustable via DIP switches

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This sensor was developed to allow inline UV measurement of UV medium pressure lamps or UV LEDs. The high UV intensity as well as the high temperatures, which let drift normally the values, were a challenge but using the right materials and sensors and the special quartz rod system makes an easy to use UV online sensor possible.

Application

The quartz rod of the sensor can be placed close to the lamp or UV LED, e.g. at the edge of the reflector.

Operation

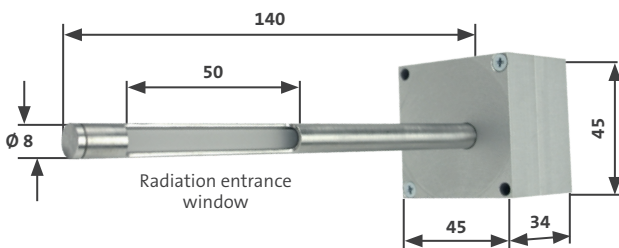
The measuring signal of the UV inline sensor QSO 3 is a DC 0... 10 V signal proportional to the uv irradiance (e.g. for a machine control).

Delivery

The QSO 3 is delivered ready for operation and can be fixed with two M4 screws. The sensor requires an auxiliary voltage DC 12-24 V. The electrical connection is made via an M12 device plug provided by the customer. If required, purge air can be connected.

Technical data

Spectral measuring ranges					
				LED	UV-LED 380 – 445 nm
			Vis		UV-VIS 380 – 445 nm
		A			UV-A 315 – 395 nm
	B				UV-B 265 – 325 nm
C					UV-C 230 – 280 nm
Measuring ranges		20 to 2,000 mW/cm ² 250 to 25,000 mW/cm ²			
Amplification factors		1, 10, 100, 1000 and in combination 0.3			
Output signal		DC 0-10 V (proportional to irradiance)			
Max. permissible intensity		10.000 mW/cm ² (max. 10 min) 30.000 mW/cm ² (max. 10 s)			
Temperature range		sensor box: 15°C...50°C quartz rod at measuring window and at end of stainless steel tube: 300 °C			
Auxiliary voltage		DC 12-24V			
Air purging		1/8" (max. 0.5 bar)			
Dimensions		approx. 45 x 45 x 34 mm; stainless steel protection tube: L = 140 mm, ø 8 mm			
Weight		approx. 200 g			
Housing materials		anodised aluminium protection tube: stainless steel quartz rod: synthetic			
Protection class		IP20			



Dimensions in mm

hönle group	Disinfection	Drying	Curing	Control	Measuring
eleco panacol-efd eltosch grafix gepa coating hönle luminez panacol printconcept raesch sterilsystems technigraf umex uv-technik speziallampen					



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