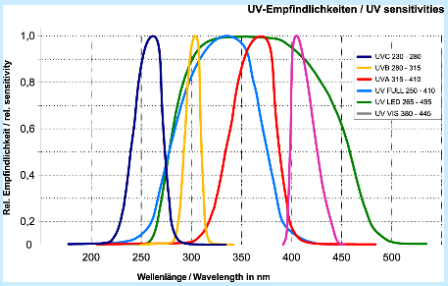
QWO

UV inline sensor

This sensor was developed to allow online 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 makes an easy to use UV online sensor possible.

Advantages

- Robust sensor for online UV measurement
- Proportional output signal DC 0… 10 V (e.g. for a simple DC voltmeter or PLC)
- Sensitivity adjustable in steps of factor 10 up to 1000, can be combined with factor 0.3

Technical data		
Spectral ranges	Art. No.	Spectral range
LED	321 03404 0000	UV-LED 380 – 445 nm*, max. 405 nm
VIS	321 03403 0000	UV-VIS 380 – 445 nm, max. 405 nm
A	301 07001 0000	UV-A 315 – 395 nm, max. 340 nm
B	301 07002 0000	UV-B 265 – 325 nm, max. 315 nm
C	321 03402 0000	UV-C 230 – 280 nm, max. 265 nm
Spectral measuring ranges		* UV-LED: 265 – 495 nm: for UV-LEDs 380…445 nm
Measuring range	20 to 20,000 mW/cm², 321 03404 0000: 250 to 15,000 mW/cm²	
Amplification factors	1, 10, 100, 1000 and in combination 0.3	
Output signal	0-10 V DC (propotional to irradiance), max. 2 mA	
Auxiliary voltage	24 V DC, max. 5 mA	
Measuring distance to lamp	approx. 20 .... 100 mm	
Max. permissable intensity	5,000 mW/cm² for max. 10 min 15,000 mW/cm² for max. 10 s	
Dimensions (WxHxT)	approx. 45 x 45 x 34 mm;	
Weight	approx. 135 g	
Temperature range	15°C ... 50°C (continuously)	
Housing matwerials	anodised aluminium	