

UV Disc

Integrator with integrated heat shield for measuring the UV dose

Application:

This measuring instrument measures the applied dose thereby examining the effects of UV lamp aging and contamination. It can be used where a conveyor belt (or similar) passes underneath uv lamps, e.g. in UV-curing ovens, photo-resist exposure systems, printed board exposure systems etc. which is typical in the furniture and printing industry, as well as PCB manufacturing and others where uv medium pressure lamps are used.

The UV Disc is placed on the conveyor belt or similar, so that the uv sensor on the back of this unit is facing toward the uv lamp. The sensor receives the incoming UV radiation while passing the lamps in one range and integrates it over the exposure time. The total dose afterwards is displayed on the LCD in mJ/cm².

With regular measurements it is therefore possible to anticipate the time and minimum UV dose needed to avoid uncured products. UV lamps can then be cleanded or replaced at the right time, i.e. not too soon to save costs and not too late, to prevent curing problems.

Technical data:

UV Disc for UV curing applications		
Spectral range	Art. No.	Spectral range
full	A002400 (standard version)	UV Full 250 – 410 nm
LED	A004192	UV-LED 265 – 495 nm *
VIS	A002915	UV-VIS 395 – 445 nm
A	A003909	UV-A 315 – 410 nm
В	A004346	UV-B 280 – 315 nm
С	A003371	UV-C 230 – 280 nm
Display	LCD, 6 digits	
Measuring range	1 – 5.000 mW/cm² (A004192 for UV-LED: 1 – 10.000 mW/cm²)	
Display range	0 – 999.999 mJ/cm ²	
Spectral measuring ranges	UV-Empfindlichkeiten / UV aenaltivities 1.0. 1	
Heat shield	Integrated	
Max. ambient temperature	110° C for 10 sec.	
Accuracy	± 5%	
Power source / Power consumption	Lithium battery 3,6 V / 100 μA (up to approx. 10.000 Betriebsstunden)	
Housing	Aluminium	
Dimensions / Weight	\varnothing 90 mm, height 12 mm / approx. 140 g	
Delivery	Battery, plastic case, certificate of calibration	
Calibration	Acc. to DIN EN ISO / IEC 17025; can be traced back to PTB	

Note: An individual printing on for this UV Disc Integrator is possible (e.g. company logo), even for smaller quantaties. If this is of interest please contact us.