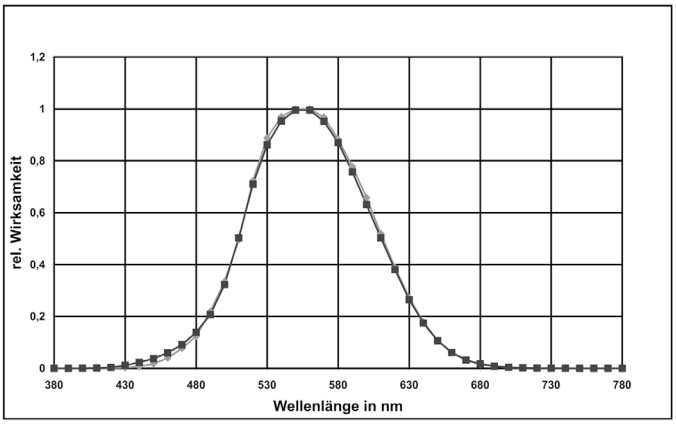
Digital measuring head for illuminance (V-Lambda) FLAD 03-VL1 with ALMEMO® D6 connector

ALMEMO® D6



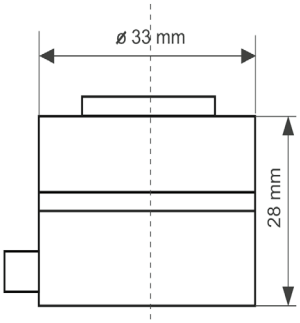


V-lambda radiation
The spectral range of the visible light is referred to as V-lambda radiation and corresponds to the sensitivity of the human eye. The measured value is a measure for the perceived brightness. The wavelength range extends from the end of the UV spectrum at 400 nm to the beginning of the IR range at 720 nm with a maximum at 555 nm. The determined illuminance in “LUX” can directly be converted into the irradiance “W/ m²”. Measurements in this particular range have a great importance for the workplace design and lighting projects.

V-lambda radiation sensor FLAD 03 VL1
V-lambda sensors are used in the field of medical and/or biological research, for weather information and forecasting systems, for climate research, for agriculture, and for the automobile industry respectively for measuring artificial lighting. The spectral sensitivity of the receiver is extremely well adapted to the sensitivity of the human eye and complies with the device class B as per DIN 5032. The measuring head FLAD 03 VL1 has a black, anodized aluminum housing. The measurement is cos corrected. The measuring head is only suitable for indoor usage.
Digital measuring head with ALMEMO® D6 connector
The measuring head works with its own AD converter. Used extension cables and the measuring device have no influence on the accuracy of the measurement.
The entire measuring range is divided into 4 measuring ranges, so that, among other things, the smallest illuminances can be measured with a very high resolution.

Technical data

Measuring range V-lambda	1 lx to 200 klx
ALMEMO® measuring ranges up to 650.00 lx up to 6500.0 lx up to 65000 lx up to 200.00 klx	
Minimum resolution	0.02 lx
Sensor system	Si / interf. filter
Spectral sensitivity	380 nm to 720 nm
Maximum spectral sensitivity	555 nm
Diffuser	PTFE
V-Lambda adaption	<3 %
Cos-correction	error f2 < 2.0 %
Linearity	< 1 %
Absolute error	< 10 %
Nominal temperature	23 °C ±3 K
Operating temperature	-20 °C to +60 °C
Switch-on time (Duty cycle)	< 1 s
Switch-off time	< 1 s
Dimensions	diameter 33 mm, height approx. 29 mm
Mounting	2 screws M2
Weight	approx. 50 g
ALMEMO® connection cable permanently connected cable 1.5 m with ALMEMO® D6 connector	
ALMEMO® D6 connector	
Refreshrate	1.5 s for all channels
Stabilization time	3 s (For data logger operation in sleep mode, a sleep delay of 3 s must be programmed)
Supply voltage	up to 6 V from the ALMEMO® device
Current consumption	approx. 4 mA



Variants (incl. works test certificate)	**Order no.**
Digital measuring head for illuminance, fixed cable, length 1.5 m, with ALMEMO® D6 connector	**FLAD03VL1**