



Measurement Equipment

UV Sensors with Current/Voltage Interface

UV-Sensor SiC131

**new: - SiC131 is successor to SiC021 -
with new optical characteristic**



Features

- ⇒ replaces the sensor series SiC021
- ⇒ measuring of UV-intensity
- ⇒ cosine correction for angle-dependent UV quantitation
- ⇒ limitation of spectral sensitivity with UV-C filter on request
- ⇒ output value calibrated to UV-value according to customer specification
- ⇒ several signal interfaces available:
 - voltage 0...2V / 0...10V
 - current 4...20mA
- ⇒ UV value monitoring via
 - ZED monitors and ZED control units
 - PLC systems

sensor type	aperture angle	measurement range	output signal	adjusted value*	min. load resistance R_{min}	max. load resistance R_{max}	
current types							
SiC131-I	160°	calibrated value is to be specified by customer	4 - 20mA	20mA	-	9V⇒330Ω / 24V⇒1kΩ	
voltage types							
SiC131-U2	160°		0 - 2V	2V	220Ω	-	
SiC131-U10	160°	0 - 10V	10V	660Ω	-	-	

* other values on request
add "-F" for sensor with UV-C filter

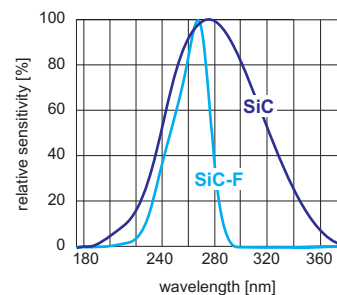
sensitive element:	silicon carbide (SiC) diode	body material:	stainless steel 1.4404
spectral range:	210...380nm (with UV-C filter: 220...290nm)	temperature drift:	< 0,1 %/K
supply voltage U_B:	9... 24V DC stabilised (min. 12V DC for SiC131-U10)	operation current:	≤ 30mA
operating temperature:	0...40°C	max. pressure:	10bar
protection class:	IP64 on terminal ends if connected to appropriate sensor cable		
dimensions:	thread: G1/4" (Whitworth BSP DIN ISO 228) thread length for mounting: 14mm	wrench size: 22 body-diameter: 25,4mm	total length: 70mm weight: 90g
connection:	SiC131: connector M12 (Hirschmann cable plug ELST 5012), mounting cable with plug included, length: 2.90m SiC131-PG: cable length 1m		(other cable lengths on request)
recommended monitoring equipment:	SiC131-Uxx-xx: on request SiC131-I-xx: PRO11DPI-I, PRO16DPI-I, UV-Compact D		
mounting restrictions:	the thread has to be covered with teflon tape or ceramo paste before mounting, use a sealing ring behind the thread		

Note:

The sensors are adjusted by using a point source (UVC 254nm).

When irradiation of a source different from point sources is being measured absolute values may differ since results of radiation physical measurements strongly depend on geometry.

Measurement results may differ from DVGW- sensors because of the different optical characteristics.



Limitation of spectral sensitivity with UV-C filter available on request especially for use with medium pressure lamps.

subject to change