

# Measurement Technique UV-Sensor SiC007 for MF001 with various output signals

for the measuring / monitoring of UV irradiation



- adjusted versions with current or voltage output
- photodiode output versions also available
- PG versions without plug connection between sensor and cable
- suitable as plug-in sensor in measurement window MF001
- daylight blind (see diagram below)
- standard without uvc-filter
- limitation of spectral sensitivity with uvc-filter on request

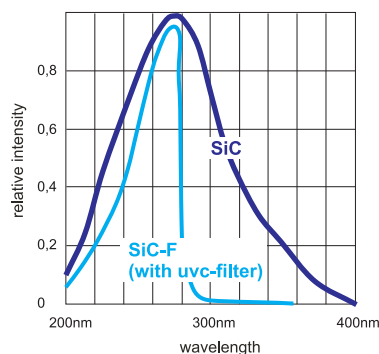
### Available Sensor Types

sensor type	signal	output value	adjusted value*	min. load resistance $R_{min}$	max. load resistance $R_{max}$
SiC007-P	photodiode output	diode current	-	-	-
SiC007-P-PG	photodiode output	diode current	-	-	-
SiC007-I	current output	4 - 20mA	20mA	-	9V⇒330Ω / 24V⇒1kΩ
SiC007-I-PG	current output	4 - 20mA	20mA	-	9V⇒330Ω / 24V⇒1kΩ
SiC007-U2	voltage output	0 - 2V	2V	220Ω	-
SiC007-U2-PG	voltage output	0 - 2V	2V	220Ω	-
SiC007-U3	voltage output	0 - 3V	3V	270Ω	-
SiC007-U3-PG	voltage output	0 - 3V	3V	270Ω	-
SiC007-U10	voltage output	0 - 10V	10V	660Ω	-
SiC007-U10-PG	voltage output	0 - 10V	10V	660Ω	-

\* other values on request. Add "-F" for sensor with uvc filter.

SiC007(-PG) is also available as digital sensor for digital operation system. Please order D-SiC007(-PG).

<b>diode type:</b>	silicon carbide (SiC) 0,0625mm <sup>2</sup>	<b>body:</b>	stainless steel 1.4305
<b>spectral range:</b>	210...380nm (with uvc-filter: 210...280nm)	<b>flare angle:</b>	26°
<b>supply voltage <math>U_B</math>: (current/voltage output)</b>	9... 24V stabilised, $I \leq 25mA$ (min. 12V for SiC007-U10)	<b>linearity within the initial voltage range:</b>	2%
<b>temperature drift:</b>	0,03 W/m <sup>2</sup> /K	<b>max. pressure:</b>	diode is sealed with quartz window-protection against humidity only
<b>operating temperature:</b>	0...40°C		
<b>dimensions:</b>	body-diameter: 20mm outer ring: 27mm	length: 86mm (SiC007) 95mm (SiC007-PG, without cable)	weight: 120g (SiC007) 155g (SiC007-PG with 1m cable)
<b>connection:</b>	SiC007: connector M12 (Hirschmann cable plug ELST 5012), mounting cable with plug included, length: 2.90m SiC007-PG: cable length 1m		(other cable lengths on request)



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

### Mounting Restrictions

Attention! The sensor is not suitable for directly use in water! The diode is sealed with quartz window-protection against humidity only. Please do not touch the surface of the sensor window.

We recommend the use of a sealing ring (O-ring, 20x1,5) in the outer ring.

Shielding connection must not be used as earth connection for safety reasons.

Do not connect or disconnect sensor-plug while supply voltage is switched on.