

# RK200-17 Ultraviolet (UVC) Radiation Sensor

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RK200-17 ultraviolet radiation sensor is a kind of ultraviolet light source used in ultraviolet sterilization equipment, industrial sewage treatment ultraviolet sterilization equipment, hospital sanitation system and other fields. The probe is suitable for ultraviolet light source detection in the field of ultraviolet sterilization (253.7nm).

## FEATURES

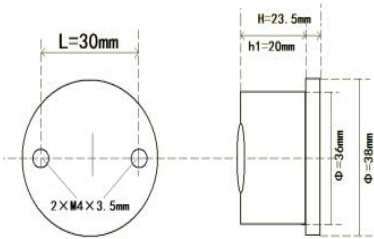
- Metal construction
- Harsh environment workable
- High sensitivity
- Light weight
- Compact size for easy use
- Long service life

## SPECIFICATIONS

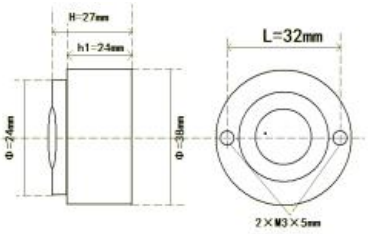
Item	SPECIFICATIONS
Spectral range	210~280nm
Supply	24VDC
Range	0-2000W/m <sup>2</sup>
Output	4-20mA, RS485
Peak response spectrum	253.7nm
Response time	≤0.5s
Non-linear	±0.1%F.S
Temperature drift coefficient	<-0.1%/℃
Operating Temperature	-20℃-+70℃
Ingress Protection	IP65
Shell material	ABS /Aluminum alloy
Storage Condition	10℃-60℃@20%-90%RH

## Dimension

Unit:mm



4-20mA



RS485

ELECTRICAL CONNECTIONS

Cable	Current(2 wires)	RS485
Red	V+	V+
White	Iout	V-
Black		RS485A
Yellow		RS485B

Note: This product has been tested and complies with European CE requirements for EMC directive.

ARAMETER SELECTION TABLE

Remark	Series	Type	Supply	Range	Output	Cable Length	
RK							
	200						
		17					
			A				12-24V
			B				Other
				A			0-2000W/m²
				B			Other
					A		4-20mA
					B		RS485
					X		Other
						1200	Units:mm (typ)
						3000	Units:mm
						...	Units:mm

Example: RK200-17BAA1500: Supply:12-24V, Range:0-2000W/m²(210-280nm), Output:4-20mA,Cable Length:1.5m.

Communication Protocol (MODBUS)

Transmission mode: MODBUS-RTU,Baud rate: 9600bps,Data bits:8,Stop bit:1,Check bit:no

Slave address:the factory default is 01H (set according to the need,01H to F7H)

- The 03H Function Code Example: Read The UVC Value

Host Scan Order(slave address:0x01)

01 03 00 00 00 01 840A

Slave Response

01 03 02 03 E8 B8FA

UVC value:(03E8)H=(1000)D=1000/100=10(μW/cm²)

5

7

Note:

1. All underlined is fixed bit;
2. The last two bytes is CRC check command;
3. If you changed the address, restart the device to take effect.

WARRANTY

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of lead time.Liability is limited to repair or replacement of defective item.



Complies with applicable CE directives.

Manual subject to change without notice. Version 1.0

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