



RF/B-1W

1-wire room temperature sensor

Measuring size: temperature

Output: DS18B20+

Highlights: modern housing design, mounting on-wall or on junction box



Description

The RF/B-1W indoor sensor in modern housing design measures the temperature in the range of -30 up to +60°C in gasiform medium and converts the measured value into a digital output signal. The resolution of the conversion is configurable from 9-bit to 12-bit (0,5/0,25/0,125/0,0625 K). The 1-Wire protocol allows a cost efficient wiring of multiple sensing devices as series, ring or tree topology in 2- or 3-wire connection. Optionally, each device has a serial number label, whereby a quick and easy start-up is possible. The temperature probe can be mounted directly on-wall by 2 fixing screws. The extra large air vents ensure an optimal ventilation as well as a high measurement accuracy.

Technical Specifications

Measurement range temp.	-30...+60°C
Sensor	DS18B20+
Accuracy	±0,5 K (-10...+85°C), sonst ±2 K
Resolution	9-12 Bit (+0,5°C up to +0,0625°C)
Circuit type	2-, 3-wire connection
Supply voltage	3...5,5 V
Current consumption	typ. 1,5 mA
Electrical connection	screw terminals max. 1,5 mm ²
Housing	ABS polyman, colour signal white like RAL 9003
Cable gland	on the back or housing side (predetermined breaking point)
Dimensions	Housing: L 82 x W 82 x H 25 mm
Protection type	IP30
Protection class	III
Storage temperature	-20...+70°C
Installation	on-wall or on flush-mounted box
Approvals	CE, EAC, RoHS



Variants

Article Number		
Sensor	Temperature	Serial number
RF/B-1W-01		
DS18B20+ (12 Bit, $\pm 0,5$ K)	-30...+60 °C	n/a
RF/B-1W-01-dec		
DS18B20+ (12 Bit, $\pm 0,5$ K)	-30...+60 °C	dec
RF/B-1W-01-hex		
DS18B20+ (12 Bit, $\pm 0,5$ K)	-30...+60 °C	hex



Dimensional Drawing

