

REAL TIME. ON-LINE. WIRELESS.



The HSR-01 provides relative humidity and ambient temperature data via RS485 interface. This humidity sensor can be used in combination with the Partial Discharge function of the TempTrackr® system. It can be operated on the same RS485 bus as the WSR-T2 reader electronic.

The robust sensor for front panel mounting will be supplied with a push / pull connector with lock function. The connector + cable contains the power supply and bus communication.

### Key features

- Relative Humidity range: 0 to 100%
- Ambient temperature measurement
- RS485 interface with Custom or Modbus RTU protocol<sup>1</sup>

### Typical Applications

- Switchgear cabinets

### Performance Specifications

Parameter	Min	Typical	Max	Units	Condition
Relative Humidity accuracy		± 5		%RH	at 25°C
Relative Humidity range	0		100	%RH	
Temperature accuracy		± 1		°C	from -40°C to + 85°C <sup>2</sup>
Operating Temperature Range	-40		+85	°C	
Supply voltage	+5		+30	VDC	5 or 24V recommended <sup>2</sup>
Power consumption		50	100	mW	
Response time		8		min	for achieving 63% of a step function

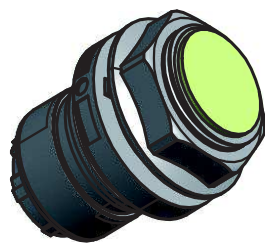
### Absolute Maximum Ratings

Parameter	Min	Typical	Max	Units	Condition
Humidity Max.			100	%RH	Non condensation
Operable Temperature Range	-40		+85	°C	
Storage Temperature Range	-40		+85	°C	
Supply voltage	0		+30	V	Push/Pull connector
GND		NA			Push/Pull connector
RS485A+	-60		+60	V	„hot swap / plug“ capable, Push/Pull connector
RS485 B-	-60		+60	V	„hot swap / plug“ capable, Push/Pull connector

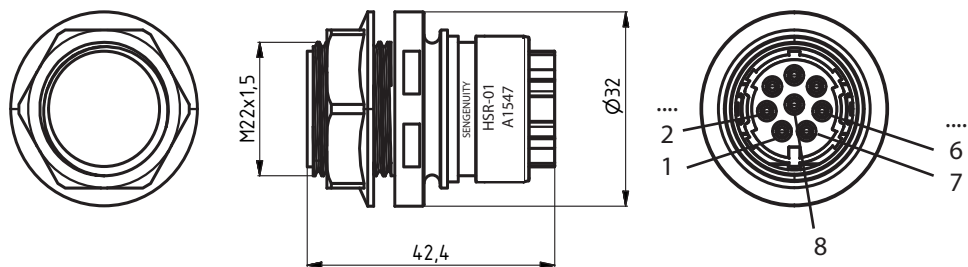
#### Notes:

1. Ask SenGenuity for software manuals
2. Please use correction values from command manual to compensate self heating

## Dimensions of HSR-01 in mm

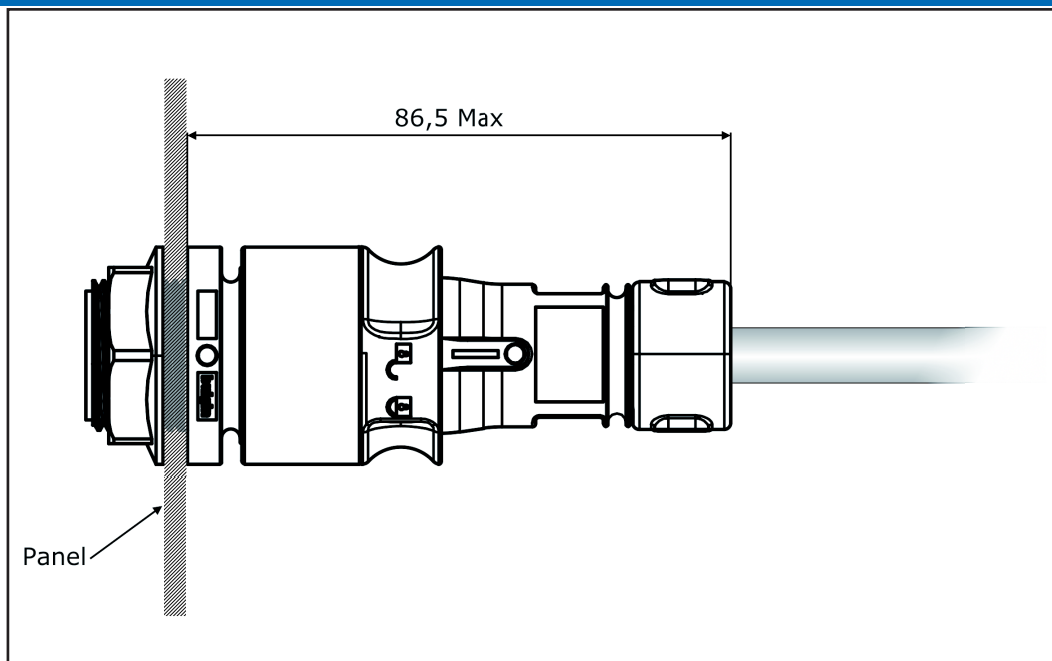


Marking:  
SENGENUITY  
HSR-01  
AYYWW



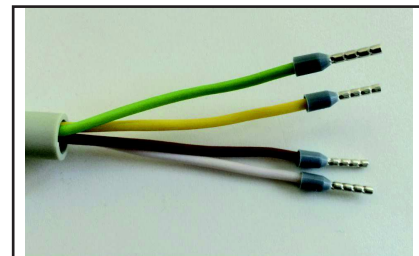
Pin Connections	
1	RS485 B-
2	+5...+30V DC
3	not connected
4	not connected
5	not connected
6	GND
7	RS485 A+
8	not connected

## HSR-Connector mounted on HSR-01, dimension in mm



Panel min. 0.8mm  
Panel max. 5.2mm

Connector (IP65) supplied with 2m cable. Other cable length on request



Wire Connections	
green	RS485 A+
yellow	RS485 B-
white	+5...+30V DC
brown	GND

## Ordering Information

Part Number	Description	Long description
713200269	<b>HSR-01</b>	Humidity Sensor Reader, RS485 interface, M22x1,5
721200093	<b>Connector for HSR-01-2m</b>	Connector for Humidity Sensor Reader with 2m long cable with wire end sleeve
713200362	<b>HSR-01 with connector-2m</b>	Humidity Sensor Reader, RS485 interface, M22x1,5 and connector, 2m long cable, wire end sleeve

Product status and specifications are subject to change.

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