

HT2W

The HT2W transmitters feature fast humidity measurement up to 100% r.H. and long-lasting, constant precision thanks to meticulously selected materials.

Please read the following instructions carefully for correct performance of this product.

INSTALLATION

Fix the plate to the panel using 2 cheese-headed screws with 4 or 5 mm diameter and then apply the instrument casing to the plate. This should be done for vertical panels and for correct positioning of the instrument with the outlets at the bottom.

The HT2W should operate with a room temperature between 0 and 50°C inclusive. Do not install near to sources of heat or near power conductors in order to reduce the effect of electromagnetic disturbance.

The connection between the HT2W and the associated instrument should not be longer than 4 metres.

Take all precautions for devices sensitive to electrostatic charges when installing, operating and cleaning the transmitter.

The filter may be removed by unscrewing the cap; the filter and cap should be washed with soapy water. Do not touch the sensor.

In the version with digital output, connect the output to the RS485 line, making sure you respect the polarity (indications A, B). The RS485 serial port allows the instrument to be part of a network, typically a PC, and provides all monitored humidity and temperature data. You must assign a unique Addr address for each linked instrument. When you buy a HT2W, this is set with Addr=1.

The serial communication protocol is the "Modicon Modbus" in ASCII mode, with the following settings:

Baudrate = 9600, data bits = 7, stop bit = 1, parity = even. The implemented functions are: "03" and "06" for respectively writing and reading of a single register.

The table below reports the features of the main registers. We recommend you to perform the writing operations to the addresses here below exclusively, else you would compromise the correct instrument operation.

Description	Register address	Resolution	Type	Standard value
Temperature	0	0.1	Integer (R)	-
Humidity	1	0.1	Integer (R)	-
Addr.	200	1	Character (R/W)	1

COMPATIBILITY WITH CHEMICAL AGENTS

The sensor has a good tolerance to chemical agents, but certain substances such as acetone, propane and sulphuric acid could destroy the sensor.

CALIBRATION

Calibration should be carried out in environments with perfectly stable humidity and temperature. Use a sample instrument placed near the instrument to be calibrated; wait for the reading to become stable and adjust the trimmer P1 (P3 for HT2WSE) until the measured values coincide.

SPECIFICATIONS

	HT2WAD	HT2WSE
Size	110x75x53 mm (WxHxD)	
Operating temperature	0...+50°C	
Range	0...100% r.H.	
Precision in humidity measurement	± 5 r.H.% (25...75% r.H.)	
Precision in temperature measurement	-	± 0.3°C @ 25°C, ± 1.0° 0...70°C
Resolution humidity	-	0.1 r.H.%
Resolution temperature	-	0.1 °C
Response time	2 minutes	
Type of sensor	Capacitive	capacitive + thermistor
Signal output	0...1V	RS485 protocol MODBUS
Connections	terminal block	
Power supply	12Vdc given by the meter	230Vac
Consumption	0.2W	2W
Front protection	IP65	

WARRANTY

LAE electronic Srl guarantees its products against defects due to faulty materials or workmanship for one (1) year from the date of manufacture shown on the container. The Company shall only repair or replace products which are shown to be defective to the satisfaction of its own technical services. The Company shall not be under any liability and gives no warranty in the event of defects due to exceptional conditions of use, misuse or tampering. All carriage expenses for returning the product to the manufacturer, after having obtained the latter's permission, and for any return to the buyer shall be paid by the buyer.

**SCHEMA DI COLLEGAMENTO - CONEXIÓN - ESQUEMA DE LIGAÇÃO
WIRING DIAGRAM - ANSCHLUßSCHEMA - SCHÉMA DE RACCORDEMENT**

