



Read this document carefully before using this device. The guarantee will be expired by device damages if you don't attend to the directions in the user manual. Also we don't accept any compensations for personal injury, material damage or capital disadvantages.

ENDA EHTS RELATIVE HUMIDITY AND TEMPERATURE TRANSMITTER

Thank you for choosing ENDA EHTS Humidity and Temperature transmitter devices.

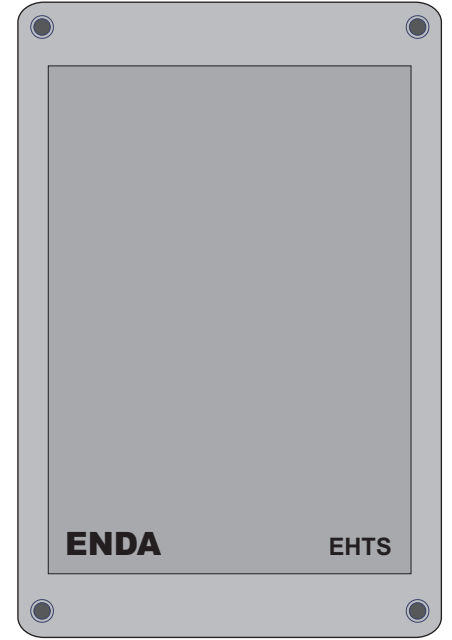
- * 120x80mm. sized.
- * Designed for measuring and controlling relative humidity and temperature.
- * -40~125°C temperature, 0~100 %RH Humidity measurement scale.
- * Cabled, Wall-mounted or duct type sensors can be selected. (Specify at order).
- * Selectable analogue 0~20mA , 4~20mA, 0~10V, 1~5V.
- * RS485 ModBus Communication feature via RTU protocol.
- * Wall-mounted.
- * Screw-terminal Connection.
- * CE Marked according to European Norms.

ORDER CODE : EHTS - XX - XXX - XXX - XX

Product Basic Code	
ENDA Humidity and temperature transmitter	
Sensor Montage Type	
W Wall-mounted	
CB Cabled connection	
DC Duct mounted	
Supply Voltage	
UV 90...250V AC/DC	
LV 9...30V DC/7...24V AC	

Modbus Selection	
BLANK	N/A
RS	Modbus Communication

Immersion Length	
50	50mm.
150	150mm.
250	250mm.
350	350mm.



RoHS Compliant

CONNECTION DIAGRAM



ENDA EHTS Series humidity and temperature transmitter devices are intended for wall-mounted installations. Make sure that the device is used only for intended purpose. The electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations. During an installation, all of the cables that are connected to the device must be free of electrical power. The device must be protected against inadmissible humidity, vibrations, severe soiling. Make sure that the operation temperature is not exceeded. The cables should not be close to the power cables or components.

ENDA INDUSTRIAL ELECTRONICS
HUMIDITY TEMPERATURE TRANSMITTER
EHTS-W-UV-50-RS

SN: XXXXXXXX
Made in Turkey

CE RoHS

8 680407 717798

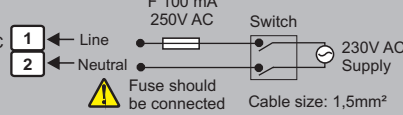
230V AC
+10% -20%
50/60Hz 5,4VA

TEMP OUT JP1
GND
HUM OUT
RS485 CON. A B

NOTE:

SUPPLY:

184-253V AC
50/60Hz 1.4VA



Note:

- 1) Mains supply cords shall meet the requirements of IEC 60227 or IEC 60245.
- 2) In accordance with the safety regulations, the power supply switch shall bring the identification of the relevant instrument and it should be easily accessible by the operator.

Equipment is protected throughout by DOUBLE INSULATION

Holding screw 0.4-0.5Nm.

Analogue Output Jumper Settings

*0~20mA Analogue Output Selection :

JP1

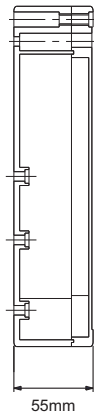
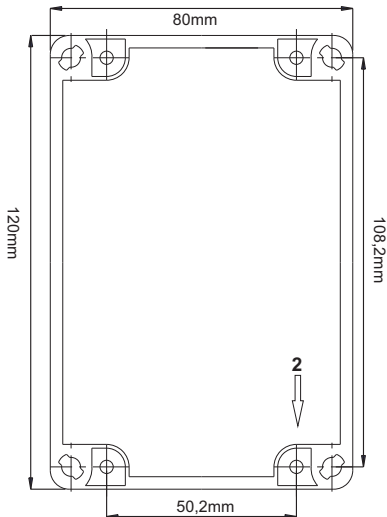
0~20mA Analogue output enabled.

*0~10V Analogue Output Selection :

JP1

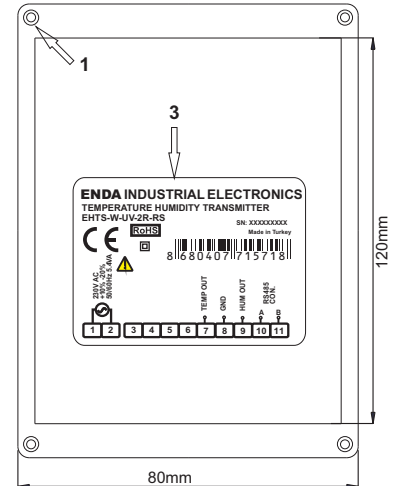
0~10V Analogue output enabled.

DIMENSIONS

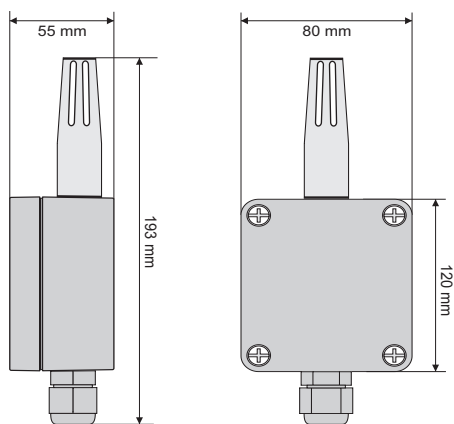


Mounting :

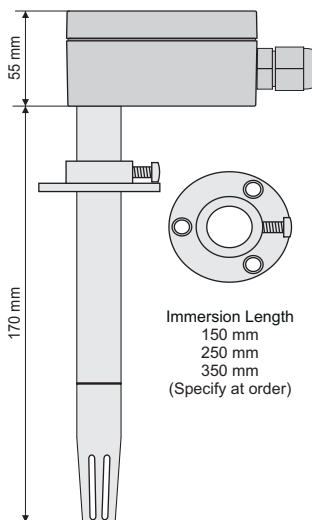
- 1) Remove the cover by unscrewing the screws in the
- 2) Mount the device from indicated points.
- 3) Perform the electrical connections by paying attention to the wiring diagram.
- 4) After the installation process, close the device and tighten the screws.



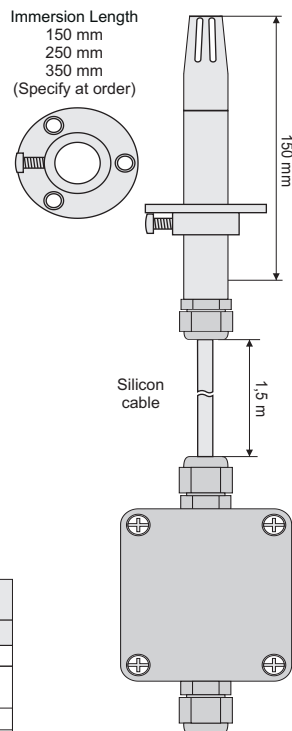
WALL-MOUNTED



DUCT TYPE



CABLED TYPE



TECHNICAL SPECIFICATIONS	
ENVIRONMENTAL CONDITIONS	
Ambient/storage temperature	0 ... +50°C/-25 ... 70°C (without icing)
Relative humidity	Relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.
Rated pollution degree	IP65 according to EN 60529
Height	Max. 2000m

⚠ Do not use the device in locations subject to corrosive and flammable gases.

ELECTRICAL CHARACTERISTICS	
Supply	For UV, 90...250V AC/DC . For LV, 9...30V DC, 7...24V AC
Power Consumption	Max. 5.4VA
Wiring	2.5 and 1.75 mm ² screw-terminal connections
Scale	Temperature : -40.0 ... +125.0°C (-40.0 ... +257.0°F) , Humidity : 0-100 % RH.
Sensitivity	0.1°C / RH or 1°C / RH can be selected.
Accuracy	±2 % RH (for 20 ~ 80 % RH) 14bit, ±4 % RH (for 0 ~ 100 % RH) 14bit, ±0.3 °C (for 20 ~ 40 °C) 14bit, ±1 °C (for -40 ~ 125 °C) 14bit,
Response Time	63% Humidity variation for 7 seconds (with 1m/sec airflow at 25°C). 63% Temperature variation for 5 seconds (with 1m/sec airflow at 25°C).
Time Accuracy	±%1
EMC	EN 61326-1: 2013
Safety Requirements	EN 61010-1: 2010 (Pollution degree 2, overvoltage category II)

OUTPUTS	
Temperature Analogue Output	0 ~ 20 mA DC or 0 ~ 10V DC selectable via jumpers. (See. Connection diagram) Load resistance for current outputs up to 500 ohms.
Humidity Analogue Output	0 ~ 20 mA DC or 0 ~ 10V DC selectable via jumpers. (See. Connection diagram) Load resistance for current outputs up to 500 ohms.

HOUSING	
Housing type	Wall-mounted.
Dimensions	L120xW80xH55mm
Weight	Approx. 190g (after packing)
Enclosure material	Self extinguishing plastics.

⚠ While cleaning the device, solvents (thinner, gasoline, acid etc.) or corrosive materials must not be used.

MODBUS ADDRESS MAP

INPUT REGISTERS

Input Register Addresses		Data Type	Data Content	Parameter Name	Read / Write permission
Decimal	Hex				
0000d	0x0000	word	Measured temperature value (°C / °F)	RR	Read Only
0001d	0x0001	word	Measured humidity value (%RH)	RR	Read Only

* Input Register parameters from which integer type is defined as a signed integer and these parameters are associated with decimal portion. ("14.0" parameter value is read as "140").

HOLDING REGISTERS

Holding Register Addresses		Data Type	Data Content	Default Parameter	Parameter Name	Read / Write permission
Decimal	Hex					
0000d	0x0000	word	Slave Modbus device address (Can be adjusted between 1 - 247)	1	Addr5	Write / Read
0001d	0x0001	word	Modbus communication speed (Baudrate, 1: 1200, 2: 2400, 3: 4800, 4: 9600, 5:19200)	9600	Baud	Write / Read

⚠ If the device's address and/or baudrate information forgotten, the parameters must be returned to their initial values. Since there is no key on the device, the device must be delivered to the authorized person. Therefore, you should note the values you changed.