

ESTxW50xxM



Environmental Sensor, Temperature, Humidity, Dew Point Transmitter, Wall



Main features

- Wall mounting
- 0-10 V or 4-20 mA output
- 0 to 50°C temperature and 0 to 100% humidity,
- -40 to 60°C dew point measuring range
- Compact housing and simple installation
- With RS485 Modbus communication
- Optional LCD display
- Software for monitoring and configuration: EST Soft A

Applications

- Monitoring for HVAC process / air conditioning / environmental ventilation control
- Building / factory / hospital/ clean room / Lab. / storeroom
- Environmental chambers / weather stationducting
- Greenhouse / livestock nursery

Description

High-grade sensor components for long-term stability and with an exceptional accuracy. Compact housing to measure temperature, humidity or dew point. Comes with standard Modbus for easy integration to existing systems with the option to choose built-in backlight display.



References

Product selection key



EST W50 M

Enter the code entering the corresponding option instead of

Code	Option	Description
EST	-	Model
<input type="checkbox"/>	H	Humidity
	D	Dew Point
W	-	Wall mounting
50	-	Temperature range
<input type="checkbox"/>	V	Output: 0...10 V
	A	Output: 4...20 mA
<input type="checkbox"/>	D	With display
	-	Without display
M	-	communication

Type selection

Mounting	Temperature range	Output	Humidity / Dew Point	Display	Code
Wall	0°... +50°C	0...10 V	Humidity	No	ESTHW50VM
Wall	0°... +50°C	0...10 V	Dew Point	No	ESTDW50VM
Wall	0°... +50°C	0...10 V	Humidity	Yes	ESTHW50VDM
Wall	0°... +50°C	0...10 V	Dew Point	Yes	ESTDW50VDM
Wall	0°... +50°C	4...20 mA	Humidity	No	ESTHW50AM
Wall	0°... +50°C	4...20 mA	Dew Point	No	ESTDW50AM
Wall	0°... +50°C	4...20 mA	Humidity	Yes	ESTHW50ADM
Wall	0°... +50°C	4...20 mA	Dew Point	Yes	ESTDW50ADM

Features

Power Supply

Power supply	DC	8...35 V
	AC	12...30 V
Current consumption	DC	12 V: 120 mA
	DC	24 V: 60 mA
	AC	12 V: 230 mA
	AC	24 V: 140 mA

Outputs

2 x Output	4...20 mA / 0...10 V
Modbus	RS-485

Environmental

Ambient temperature	0°... +50°C (32°... +122°F)	Operating
	-25° ... +60°C (-13° ... +140°F)	Storage
Degree of protection	Body	IP65
	Probe	IP20
Electrical protection	Polarity protection, over voltage and short circuit	

Measuring Values

Sensor type	Capacitive humidity sensor & PT 100 Ω A Class	
Measuring range	Temperature (T)	0...50°C (32...122°F)
	Humidity (H)	0...100% RH
	Dew Point (D)	-40...60°C (-40...140°F)
Signal connection	3-wire	
Accuracy (@ +25°C)	Temperature	$\pm 0.15^{\circ}\text{C} + 0.002^{\circ}\text{C} \times t \text{ actual}$
	Humidity	$\pm 2\%$ RH
Response times (@ +25°C)	< 20 S	
Load resistance	Current output	< 500 Ω
	Voltage output	> 10 K Ω

Mechanics/electronics

Connection

Electrical connection	Screw terminal, Cable gland
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Display

Display type	LCD Module with green back light, double line character
Heights of character	5.56 mm

Wiring

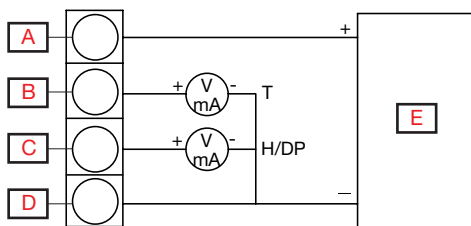


Fig. 1 Analogue output

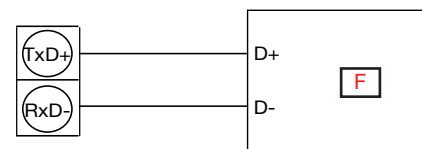
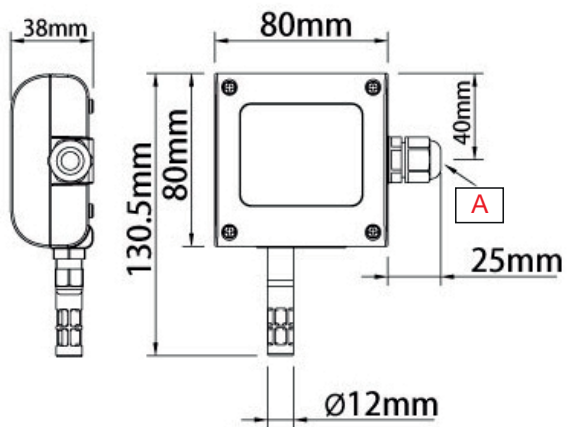


Fig. 2 RS485 Signal connector

A	V _{CC}	D	GND
B	Output 1	E	8...35 VDC and 12...30 VAC
C	Output 2	F	Host (RS485)

Housing

Housing	PC fire-proof class (PC-110)
Probe	PC fire-proof class (PC-110)
Filter	PC membrane filter
Installation	Wall mounting
Weight	157 g

Dimensions

A	M16 x 1.5 Cable gland
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Compatibility and conformity

Approvals and markings

CE-marking	CE
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Delivery contents and accessories

▶ Delivery contents

Environmental sensor: ESTxW50xxM

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