

DTS-M

Digital temperature sensor for ducts

The DTS-M series are digital temperature sensors powered over Modbus with 24 VDC via an RJ45 connector. They are intended for duct channels and are compatible with various control systems based on temperature. The sensor element is placed in a stainless steel tube, which simplifies the cleaning of the duct system. There are two product versions featuring different tube length - 85 and 165 mm.

Key features

- Wide temperature range: -30—70 °C
- Modbus RTU communication
- Easy wiring via an RJ45 socket
- Low-maintenance and easy-to-clean design

Technical specifications

| | | |
|---------------------|---------------------------|----------------------------|
| Supply voltage | 24 VDC, Power over Modbus | |
| Power consumption | Maximum: 0,192 W | |
| | Nominal: 0,18 W | |
| | Imax: 8 mA | |
| Sensor range | -30—70 °C | |
| Accuracy | ±1 °C | |
| Protection standard | IP65 | |
| Ambient conditions | Temperature | -30—70 °C |
| | Rel. humidity | 5—95 % rH (non-condensing) |



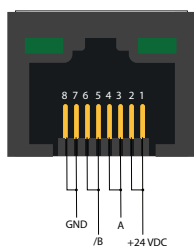
Article codes

| Article code | Supply | Probe length |
|--------------|-------------|--------------|
| DTS-M-080 | 24 VDC, PoM | 85 mm |
| DTS-M-160 | | 165 mm |

Wiring and connections

| RJ45 socket | |
|-------------|-------------------------------------|
| Pin 1 | Supply voltage |
| Pin 2 | Supply voltage |
| Pin 3 | Modbus RTU communication, signal A |
| Pin 4 | Modbus RTU communication, signal A |
| Pin 5 | Modbus RTU communication, signal /B |
| Pin 6 | Modbus RTU communication, signal /B |
| Pin 7 | Ground, supply voltage |
| Pin 8 | Ground, supply voltage |

RJ45 socket



Area of use

- Measuring temperature in duct channels

Indications


| | | | |
|--|-------------|----|---|
| | 1 | On | During normal operation, the left LED lights up to indicate that the unit is supplied with 24 VDC |
| | 2 | On | Indicates active Modbus communication |
| | RJ45 socket | | To plug in the communication and power cable |

DTS-M

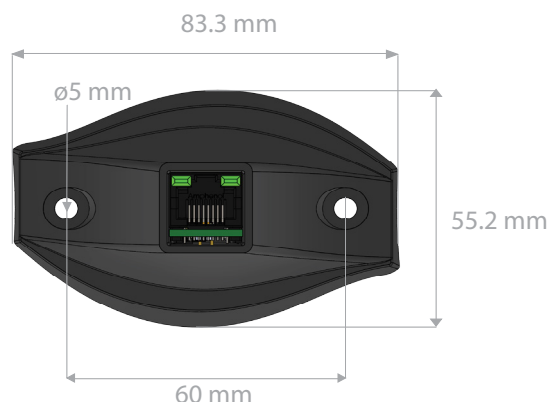
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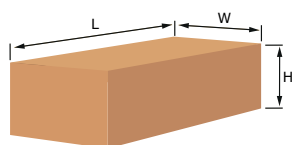
Standards

- Low Voltage Directive 2014/35/EC 
 - EN 60529:1991 Degrees of protection provided by enclosures (IP Code) Amendment AC:1993 to EN 60529
 - EN 60730-1:2011 Automatic electrical controls for household and similar use - Part 1: General requirements
- EMC Directive 2014/30/EC
 - EN 61326-1:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
 - EN 61326-2-3:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
 - EN 61326-2-5:2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements - Test configurations, operational conditions and performance criteria for devices with field bus interfaces according to IEC 61784-1
- WEEE Directive 2012/19/EU
- RoHS Directive 2011/65/EU

Fixing and dimensions

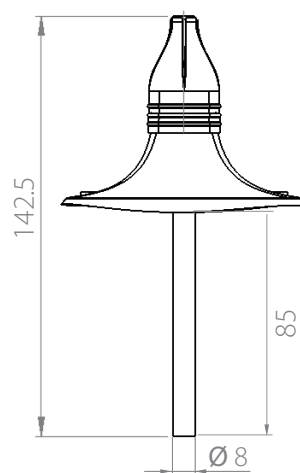


Packaging

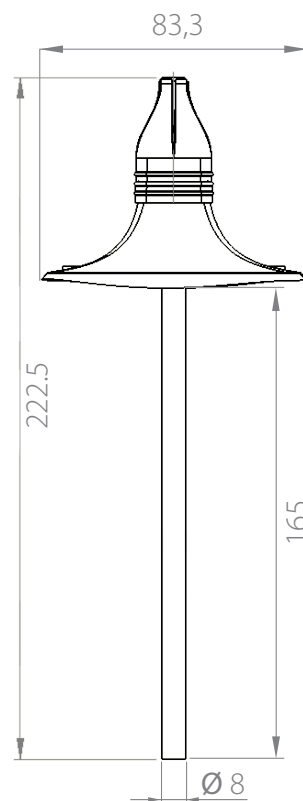


| Article | Packaging | Length [mm] | Width [mm] | Height [mm] | Net weight | Gross weight |
|------------------------|------------------|-------------|------------|-------------|------------|--------------|
| DTS-M-080 DTS-L-080 | Unit (1 pc.) | 82 | 55 | 175 | 0.058 kg | 0.062 kg |
| | Carton (10 pcs.) | 492 | 182 | 84 | 0.58 kg | 0.77 kg |
| | Box (60 pcs.) | 590 | 380 | 280 | 3.48 kg | 5.54 kg |
| DTS-M-160 DTS-L-160 | Unit (1 pc.) | 82 | 55 | 225 | 0.070 kg | 0.076 kg |
| | Carton (10 pcs.) | 492 | 182 | 84 | 0.705 kg | 0.915 kg |
| | Box (40 pcs.) | 590 | 380 | 280 | 4.23 kg | 6.41 kg |

DTS-M-080



DTS-M-160



Global trade item numbers (GTIN)

| Article | Unit | Carton | Box |
|-----------|---------------|----------------|---------------|
| DTS-M-080 | 5401003701034 | 05401003002100 | 5401003500880 |
| DTS-L-080 | 5401003002087 | 5401003701010 | 5401003500866 |
| DTS-M-160 | 5401003002117 | 5401003701041 | 5401003500897 |
| DTS-L-160 | 5401003002094 | 5401003701027 | 5401003500873 |

