DL-10-BK   DL-10

Remote Temperature/Humidity/Dew Point Sensing Module (RS-485)

Features

- Measurement Ranges: -20 ~ +60 °C and 0 ~ 100% RH
- Accuracy: ±0.4 °C; ±3.0% RH
- 10 ~ 30 VDC Power Input
- RS-485 Communication interface
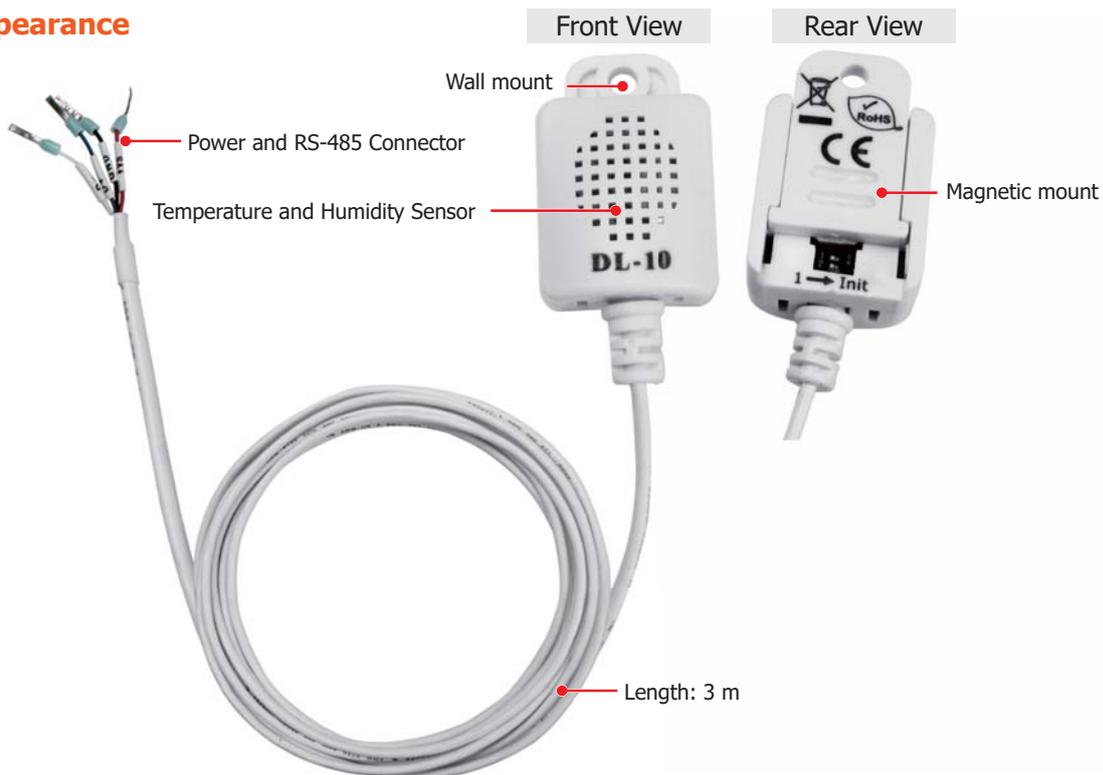- Modbus RTU Protocol

Introduction

The DL-10 is a RS-485 remote temperature, humidity and dew point module that gives you real time temperature, humidity and dew point information at the same time. It contains an RS-485 communication interface and an sensor for measuring temperature, humidity and dew point. The DL-10 module supports Modbus RTU communication protocol for getting measured temperature, humidity and dew point values. DCON Utility Pro provides easy and convenient interfaces for users to configure the module. Based on an amazing tiny form-factor, the DL-10 achieves the maximum space savings that allows it to be easily installed anywhere.
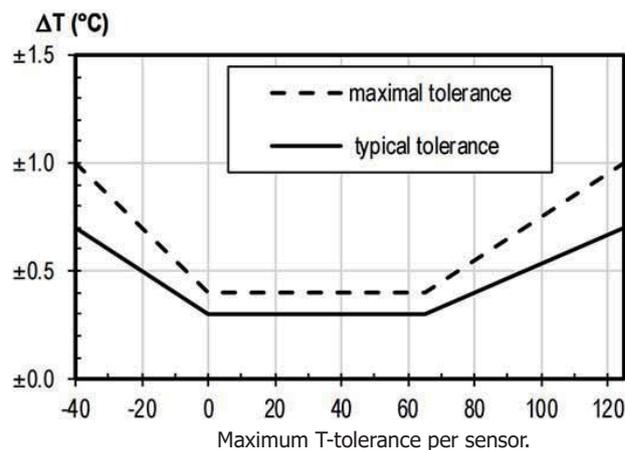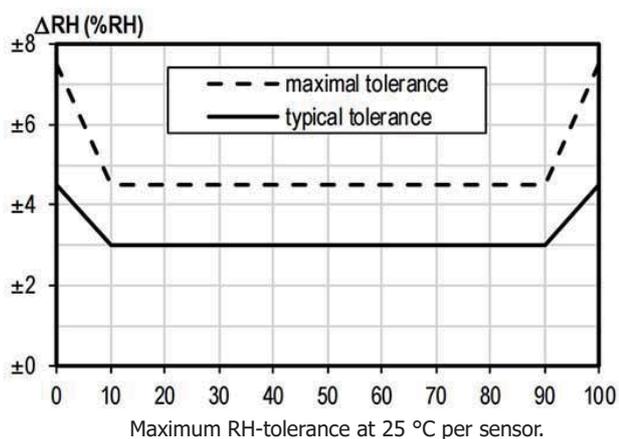
Applications

- Transportation of food or pharmaceuticals
- Food and beverage industry (HACCP)
- Blood stations, pharmacies
- Building and energy management
- Warehouses
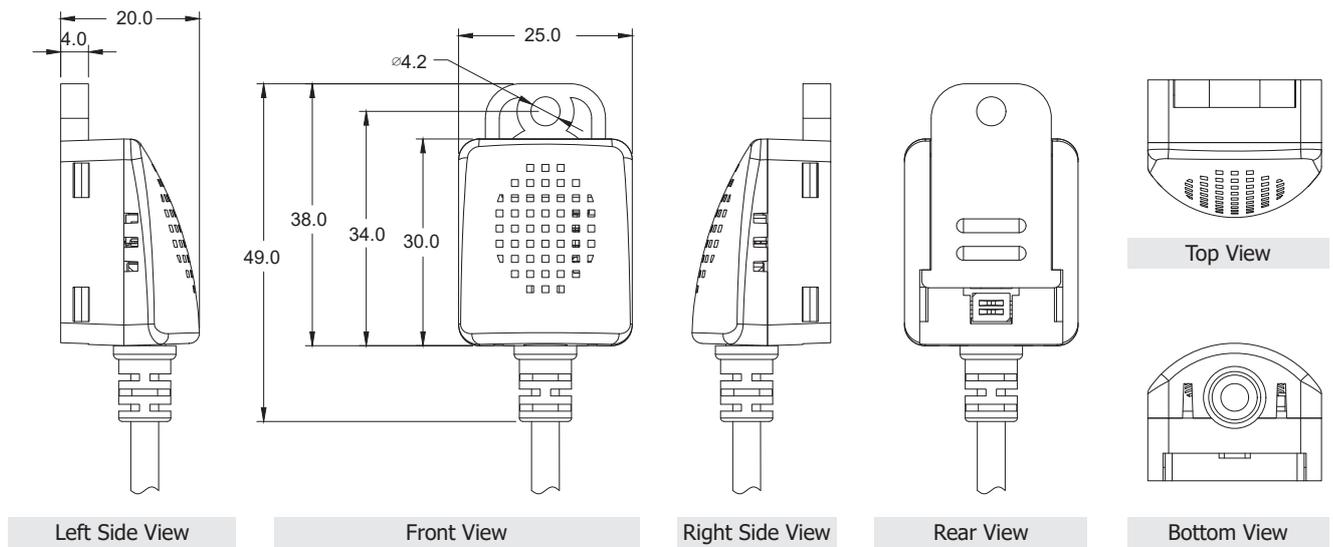- Museums, archives, galleries

Appearance

Front View | Rear View

Wall mount

Power and RS-485 Connector

Temperature and Humidity Sensor

DL-10

Magnetic mount

1 → Init

Length: 3 m

■ Specifications

Models	DL-10-BK	DL-10
Temperature Sensor		
Measuring Range	-20 ~ +60 °C (-4 ~ +140 °F)	
Resolution	0.1 °C	
Accuracy	Typical: ±0.4 °C; refer to figure 2	
Precision	±0.1 °C	
Humidity Sensor		
Measuring Range	10 ~ 95% RH	
Resolution	0.1% RH	
Accuracy	Typical: ±3% RH @ 20 ~ 80% RH	
Precision	±0.1% RH	
Dew Point		
Range	Calculated using temperature and relative humidity	
Resolution	0.1 °C	
LCD Display		
Displayed Information	-	
Data Logger		
Time Interval	-	
Max. Records	-	
Mode	-	
Overwrite Limitation	-	
Communication		
Interface	RS-485; non-isolated	
Baudrate	1200 ~ 115200 bps	
Data format	N,8,1	
Protocol	Modbus RTU	
Max. Modules on same bus	32	
Power		
Input Range	+10 ~ 30 VDC	
Power Consumption	0.05 W	
Mechanical		
Dimensions (W x L x H)	25 mm X 20.2 mm X 30 mm	
Cable Length	3 m	
Waterproof Level	-	
Installation	Magnetic mount; Wall mount	
Environment		
Operating Temperature	-20 ~ +60 °C	
Storage Temperature	-30 ~ +80 °C	
Ambient Relative Humidity	10 ~ 95% RH, Non-condensing	

Maximum RH-tolerance at 25 °C per sensor.

Maximum T-tolerance per sensor.

▪ Dimensions (Units: mm)

20.0
4.0
25.0
⌀4.2
49.0
38.0
34.0
30.0

Left Side View   Front View   Right Side View   Rear View   Bottom View

Top View

▪ Ordering Information

DL-10 CR	Remote Temperature/Humidity/Dew Point Sensing Module, Using Modbus RTU Protocol, 3 M (White Cover) (RoHS)
DL-10-BK CR	Remote Temperature/Humidity/Dew Point Sensing Module Using Modbus RTU Protocol, 3 M (Black Cover) (RoHS)

▪ Optional Accessories

tM-7561 CR		Isolated USB to RS-485 Converter (RoHS)
tM-7520U CR		Isolated RS-232 to RS-485 Converter (RoHS)