

# Temperature and Humidity Data Logger



## 9.1. IP66 Remote Temperature and Humidity Data Logger with LCD Display

P9-1-1

- DL-100T485P/DL-100T485P-W/DL-100TM485P/DL-100TM485P-W ----- P9-1-1



Contact: Rémy GUEDOT

5 rue E. Charpentier

info@rg2i.com

42000 Saint Etienne

www.rg2i.com

Tél: 04 77 92 03 56

Fax: 04 77 92 03 57

**DL-100T485**  
Temperature and Humidity Data Logger with RS-485 Module  
COM0: Non-Isolated RS-485  
Operating Temperature: -20 ~ +60 °C  
Humidity Range: 0 ~ 100%  
Required Supply Voltage: +20 Vdc ~ +30 Vdc  
Power Consumption: 0.18W @ 24 Vdc  
Installation: DIN-Rail  
Wire Connector: REPT: #41  
BLACK: GND  
GREEN: DATA+  
WHITE: DATA-

## 9.1. IP66 Remote Temperature and Humidity Data Logger with LCD Display

**NEW**

DL-100T485P  
DL-100TM485P

DL-100T485P-W  
DL-100TM485P-W

**DL-100T485P/DL-100TM485P**  
**DL-100T485P-W/DL-100TM485P-W**

IP66 Remote Temperature and Humidity Data Logger with LCD Display

### Features

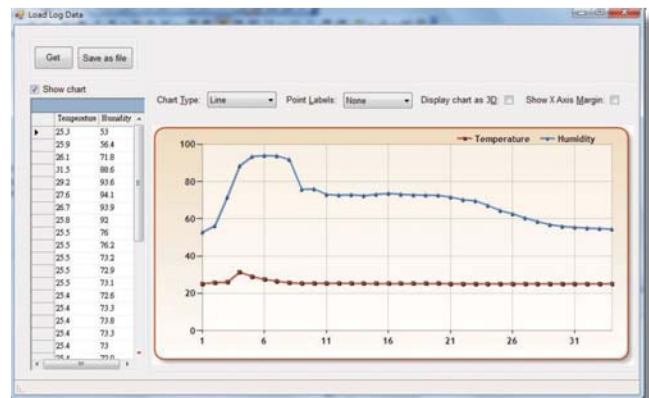
- Measurement Ranges: -20 ~ +60°C (-31 ~ +176°F) and 0 ~ 100% RH
- Accuracy: +/-0.3°C; +/-1.8% RH
- LCD Display Shows Temperature, Humidity and Module ID
- 10 ~ 30 Vdc Power Input
- IP66 Waterproof
- Data Logger Can Store Up to 4088 Temperature and Humidity Records
- RS-485 Communication interface
- DCON or Modbus RTU Protocol
- Windows Software Included



### Introduction

The DL-100T485P/DL-100T485P-W/DL-100TM485P/DL-100TM485P-W is a temperature and humidity data logger module. It contains an RS-485 communication interface and an LCD display to show a variety of temperature, humidity and module ID data. The data storage memory can store up to 4088 temperature and humidity records.

The Data Logger Utility is included to allow installation, configuration, retrieval and display of data in a powerful chart format that can be exported to Excel.



### Applications

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



## Greenhouse Automation



## Specifications

Models	DL-100T485P	DL-100T485P-W	DL-100TM485P	DL-100TM485P-W
<b>Temperature Sensor</b>				
Measuring Range	-20 ~ +60°C (-31 ~ +176°F)			
Resolution	0.1°C			
Accuracy	Typical: +/-0.3°C; refer to figure 1 for details			
Precision	+/- 0.1°C			
<b>Humidity Sensor</b>				
Measuring Range	0 ~ 100% RH			
Resolution	0.1% RH			
Accuracy	Typical: ±1.8% RH @ 20 ~ 80% RH; refer to figure 2 for details			
Precision	+/- 0.1% RH			
<b>LCD Display</b>				
Displayed Information	Temperature (°C and °F), Humidity (RH), Module ID			
<b>Data Logger</b>				
Time Interval	10 seconds to 1 day			
Max. Records	4088 temperature and humidity records			
Mode	Overwrite or stop logging when storage space is full			
Overwrite Limitation	1,000,000 cycles			
<b>Communication</b>				
Interface	RS-485; non-isolated			
Baudrate	1200 ~ 115200 bps			
Data format	N,8,1			
Protocol	DCON		Modbus RTU	
Max. Modules on same bus	32			
<b>Power</b>				
Input Range	+10 ~ 30 Vdc			
Power Consumption	0.15 W			
<b>Mechanical</b>				
Dimensions (W x L x H)	82 mm x 126 mm x 55 mm			
Waterproof Level	IP66			
Installation	DIN-Rail; Wall mount			
<b>Environment</b>				
Operating Temperature	-20 ~ +60°C			
Storage Temperature	-30 ~ +80°C			
Ambient Relative Humidity	5 ~ 95% RH, Non-condensing			

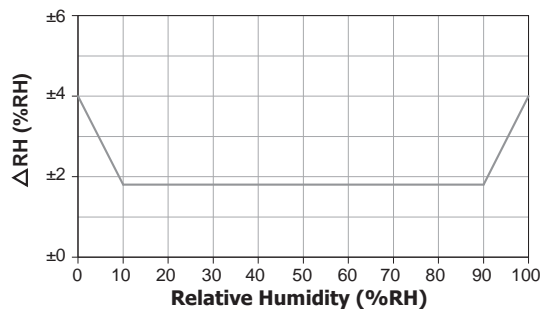


Figure 1: Maximum RH-tolerance at 25°C per sensor.

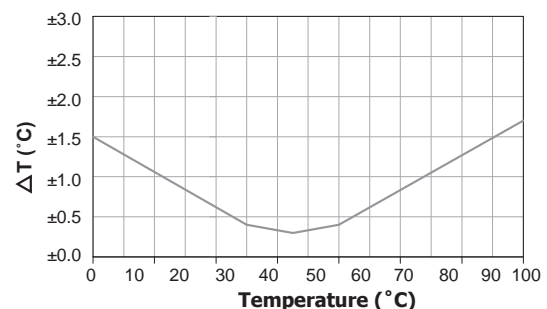


Figure 2: Maximum T-tolerance per sensor.

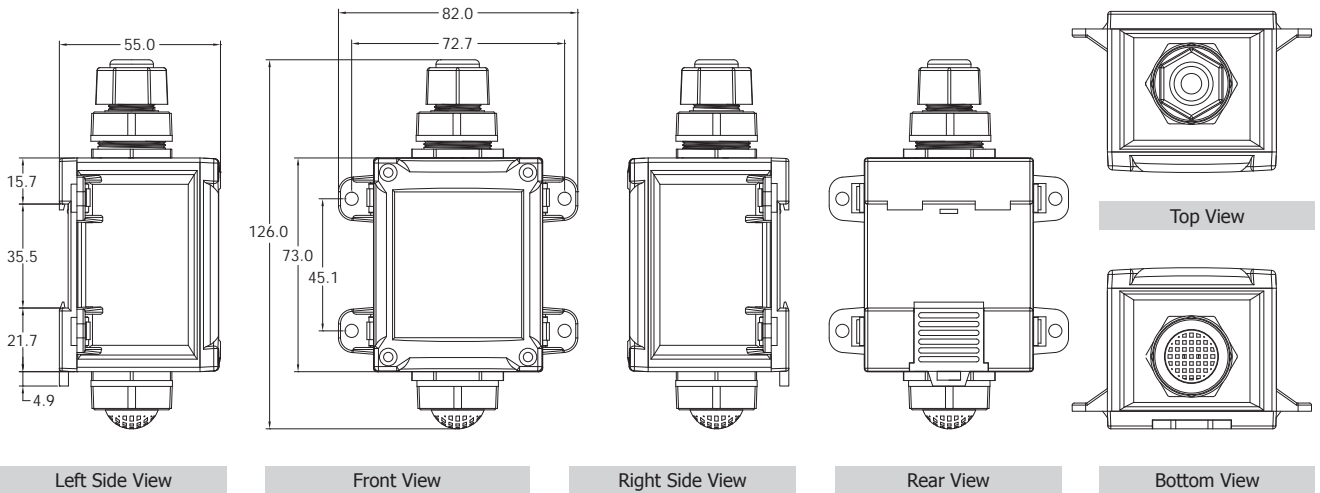
## Installation



**Appearance**



**Dimensions (Units: mm)**



**Ordering Information**

DL-100T485P CR	DCON Protocol Based IP66 RS-485 Remote Temperature and Humidity Data Logger with LCD Display (Black Cover) (RoHS)
DL-100T485P-W CR	DCON Protocol Based IP66 RS-485 Remote Temperature and Humidity Data Logger with LCD Display (White Cover) (RoHS)
DL-100TM485P CR	Modbus RTU Protocol Based IP66 RS-485 Remote Temperature and Humidity Data Logger with LCD Display (Black Cover) (RoHS)
DL-100TM485P-W CR	Modbus RTU Protocol Based IP66 RS-485 Remote Temperature and Humidity Data Logger with LCD Display (White 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)
MDR-20-24 CR	24V/1A, 24 W Power Supply with DIN-Rail Mounting (RoHS)