

1. General

The temperature sensor module connects to a small sensor and transmits the temperature information over the bus. The module has a resolution of 0.5°C and sends its temperature data at regular intervals over the bus, it also sends this information when a temperature change of 1°C or more is detected between two internal measurement cycles (the internal sample interval is 2 seconds).

The module allows to do temperature logging with software running on a remote PC connected to the bus via the PC interface module (PCI04031) or through IP if connected to the computer network.

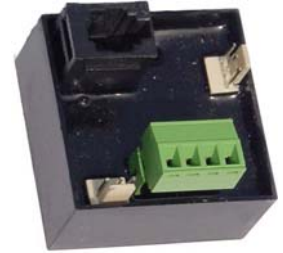
The temperature module has also two digital inputs. These inputs can be connected to a function in the Easylink software program.

There are also two led outputs, which allows you to see feedback of the functions linked to the two digital inputs. A way to use the inputs is to use them as temperature setpoint (up or down) buttons. A led can be programmed to indicate when the heating is on.

If there is a failure of the temperature sensor, the two led's blink one after another and the inputs become difficult to handle. If this is the case, please check out the temperature sensor or the connections to the RJ45 plug.

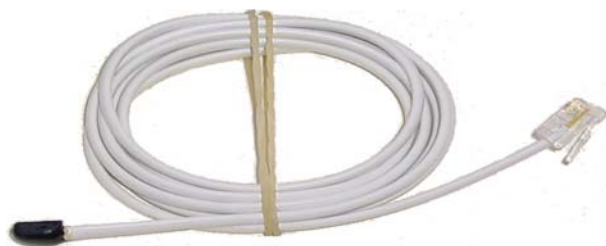
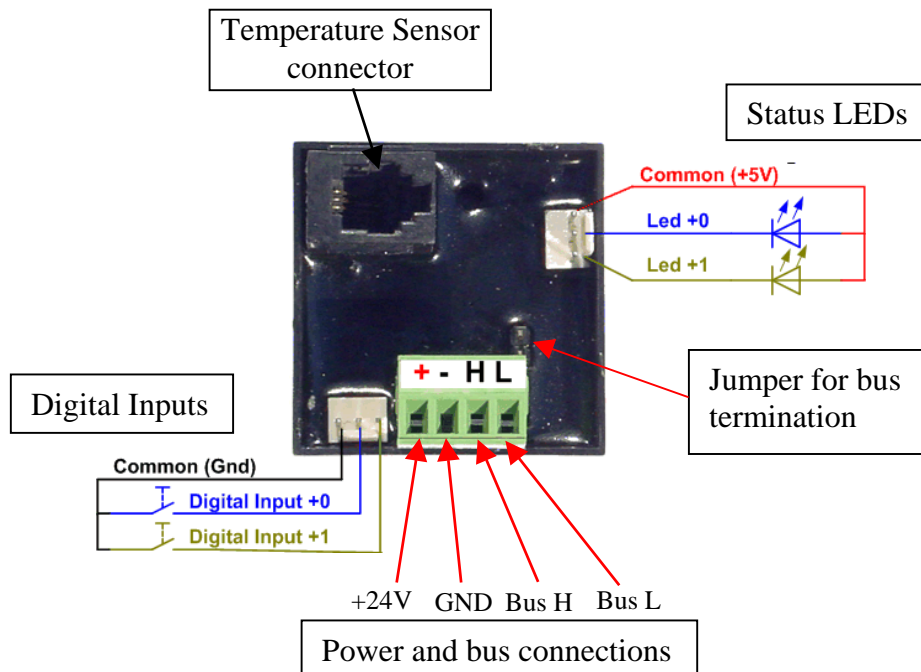
The module contains two programmable base address. One address for the temperature sensor and one for the digital inputs. There are 50 addresses (0..49) for the temperature sensors.

The pre-wired connection wires for the buttons and LED's can be ordered separately (Ordercode : DLQ-C-3P).



2. Installation & connections

Before applying power to the module, you should check if all connections are correct, connecting 24V to the bus inputs will damage the module and is not covered under warranty.



Sensor assembly (order code TSS03011)

**3P Cable assembly order code : DLQ-C-3P**

Cable for connecting the LED's and switches
Length 40 cm.

Connect the sensor assembly to the module. In case of an error caused by bad connections to the sensor the LED's will start to blink one after another.

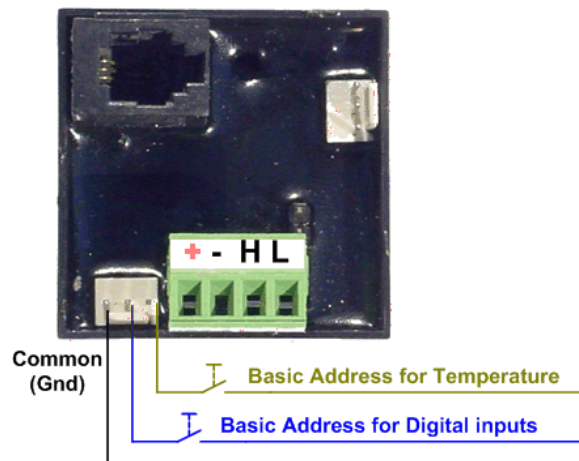
Do not mount the sensor very near to the module itself, this is because the module produces a small amount of heat and would create a faulty measurement.

3. Module software configuration

Only the module's base addresses need to be programmed, the default addresses are both 0 in a new module. The module communicates with the Easyplus central system through the bussystem. It sends the temperature information and the status of the inputs.

The base address for the digital inputs can be programmed by pressing the button "base address buttons PROGRAM" in the Easylink software. Then Press the button "basic address for digital inputs" on the module itself (see picture below : blue color). The module accepts the address and indicates this by briefly flashing the two connected LED's on the module and it gives also a message in the Easylink software program. Now the address of the digital inputs of the module is linked.

After we program the base address for the temperature in a similar way. The base address for the temperature is programmed by pressing the button "base address temperature zone PROGRAM" in the Easylink software. Then Press the button "basic address for temperature" on the module itself (see picture below : light green color). The module accepts the address and indicates this by briefly flashing the two connected LED's on the module and it gives also a message in the Easylink software program. Now the address of the temperature sensor is linked.



Various programs for temperature control can be used to display the temperature information of this module, temperature logger, temperature controller, PDA software, etc ...

4. Module hardware configuration

A jumper can be placed to terminate the bus when the module is at the far end of the system bus.

Important note : The bus only may be terminated at 2 points in the system.

5. Ordering information

Main module

TMP03101 Temperature sensor module

Optional accessories

TSS03011 Temperature sensor assembly

DLQ-C-3P 3P Cable assembly

6. Technical specification

Connector lead length	40cm (must be ordered separately)
Supply voltage	12..24V
Current consumption	14mA @ 24V (LED's OFF)
Range	-30°C to +95°C
Resolution	0.5°C
Accuracy	+/- 1°C
LED output current	6 mA
Dimension (h w d)	13 * 40 * 40 mm
Max wire diameter	1.5mm ²
Operating temperature	0. . 60°C
Netto weight	35 gr.

*** Important remark : the information of this datasheet is only for the TMP03101 modules with software higher then version V7.0

1. General	1
2. Installation & connections.....	1
3. Module software configuration	2
4. Module hardware configuration	2
5. Ordering information.....	3
6. Technical specification.....	3