12 Channel Precision Temp Sensor Module

Description

The T3E-PT12 is a precision temperature measurement module which can accept up to twelve instrument grade sensors. The unit accepts platinum Pt elements, either 100 ohm or 1k ohm variety. It also can accept 10k thermistors, Type II and Type III. Cabling can be accomplished using two , three or four wire connections. Communications is supported over Bacnet and Modbus over both RS485 and the Ethernet ports. All readings and the various settings are available as Bacnet objects and Modbus registers.

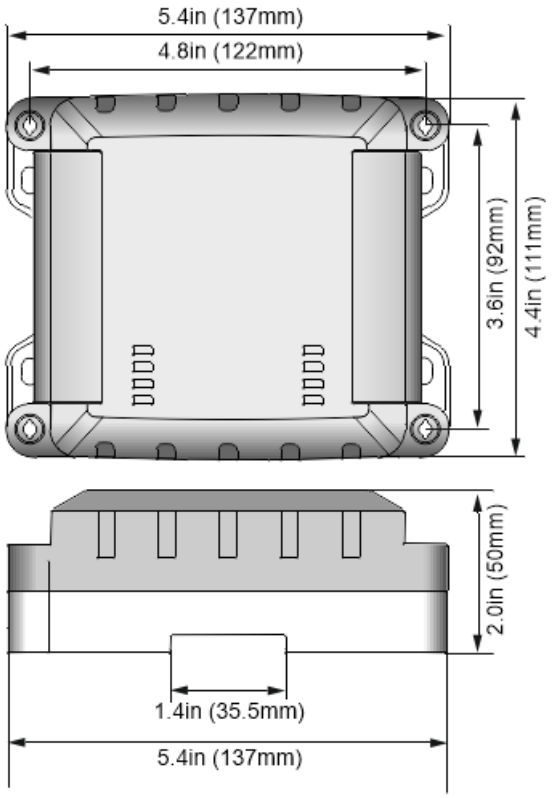
Highlights:

- 12 Analog PT100 or PT1000 Inputs
- Serial RS485 Standard
- Light-weight and Compact
- Probe Connection: 2, 3 and 4 wires
- Communications: Bacnet and Modbus protocol Supports both MSTP and IP connections
- UL listed ABS enclosure with rubberized texture creates a high end feel
- The RS485 port has separate upstream and a downstream connectors to make troubleshooting easier
- Each input as well as the RS485 connections have a separate screw terminal, there's no need to gang two wires under one terminal for any of the terminations
- T3000 front end is free and open source: http://tinyurl.com/hgxavu5

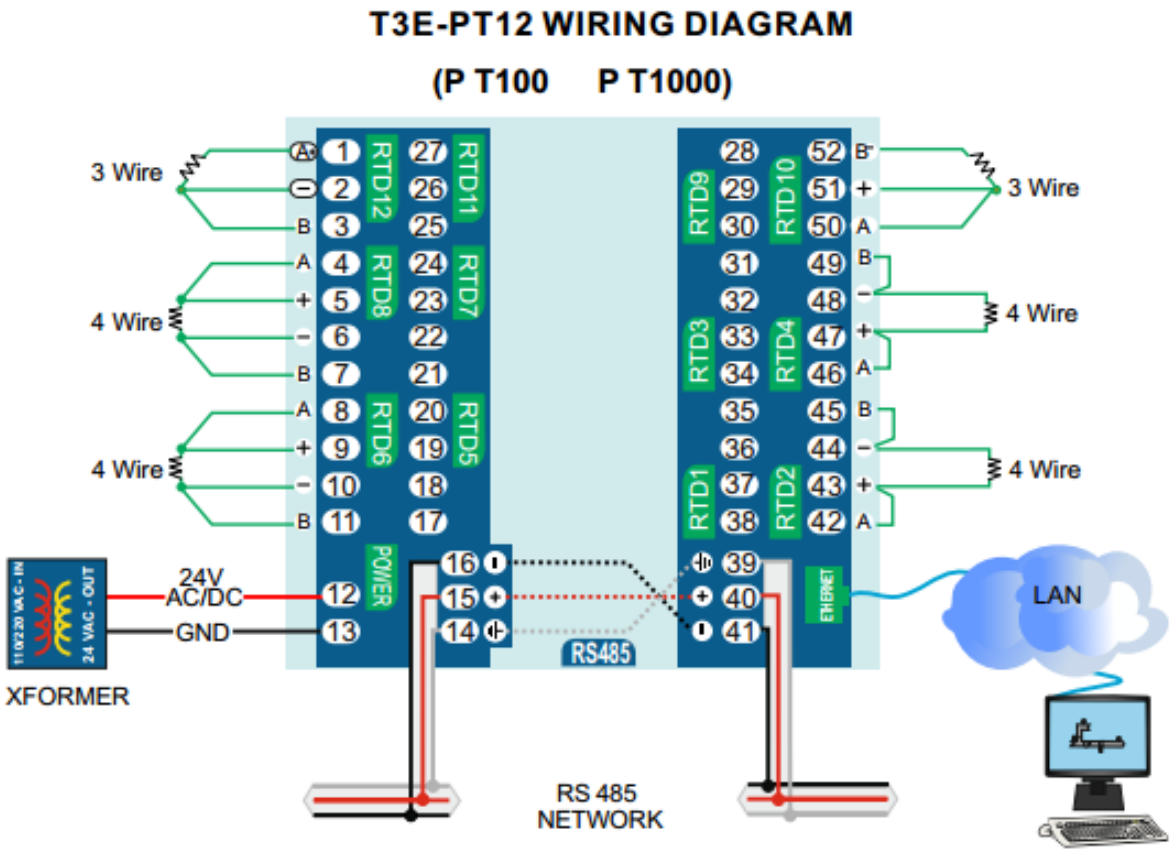
Specifications

Sensor Type	PT100 or PT1000	
	Accuracy	**Temperature Range**
PT100	+/- 0.01°C	-200°C to 300°C
PT1000	+/- 0.01°C	-200°C to 300°C
Probe Connection	2, 3 and 4 wires	
Communications	Bacnet and Modbus protocol, supports both MSTP and IP connections	
Power Supply	12~24VAC/DC ±10%, 50-60Hz	
Baudrate	9600, 19.2k, 38.4k, 57.6k, 115.2kBaud	

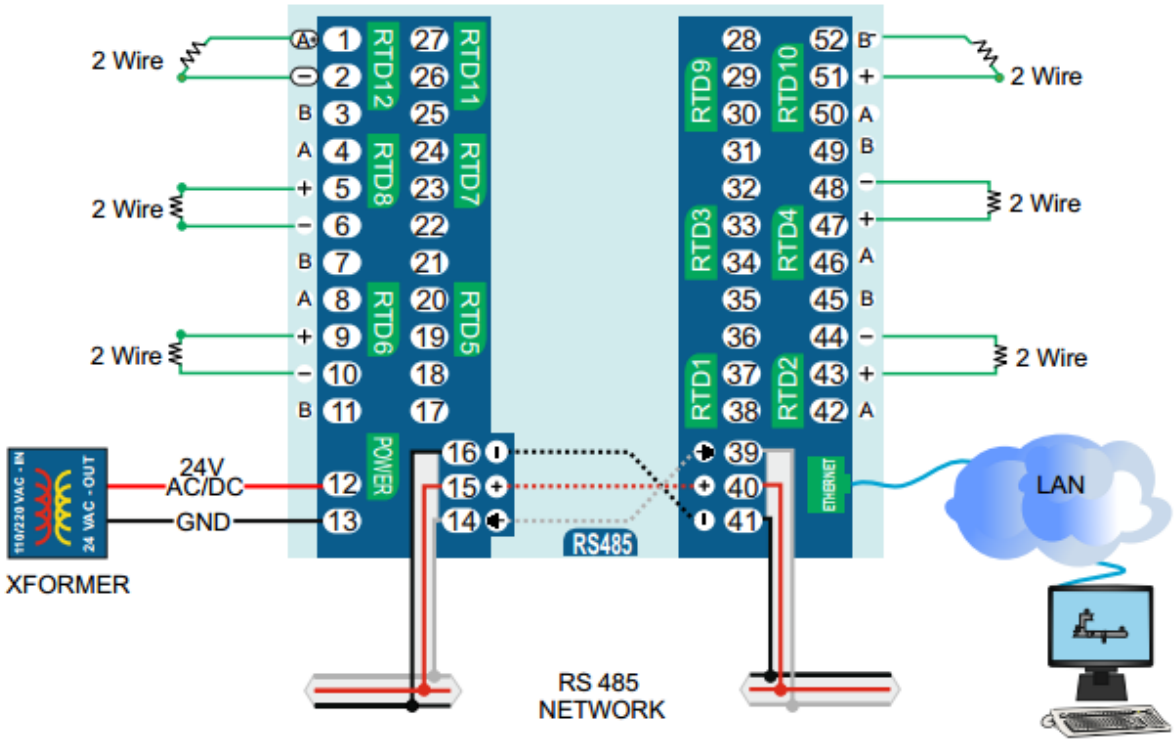
Dimension



Wiring Diagram



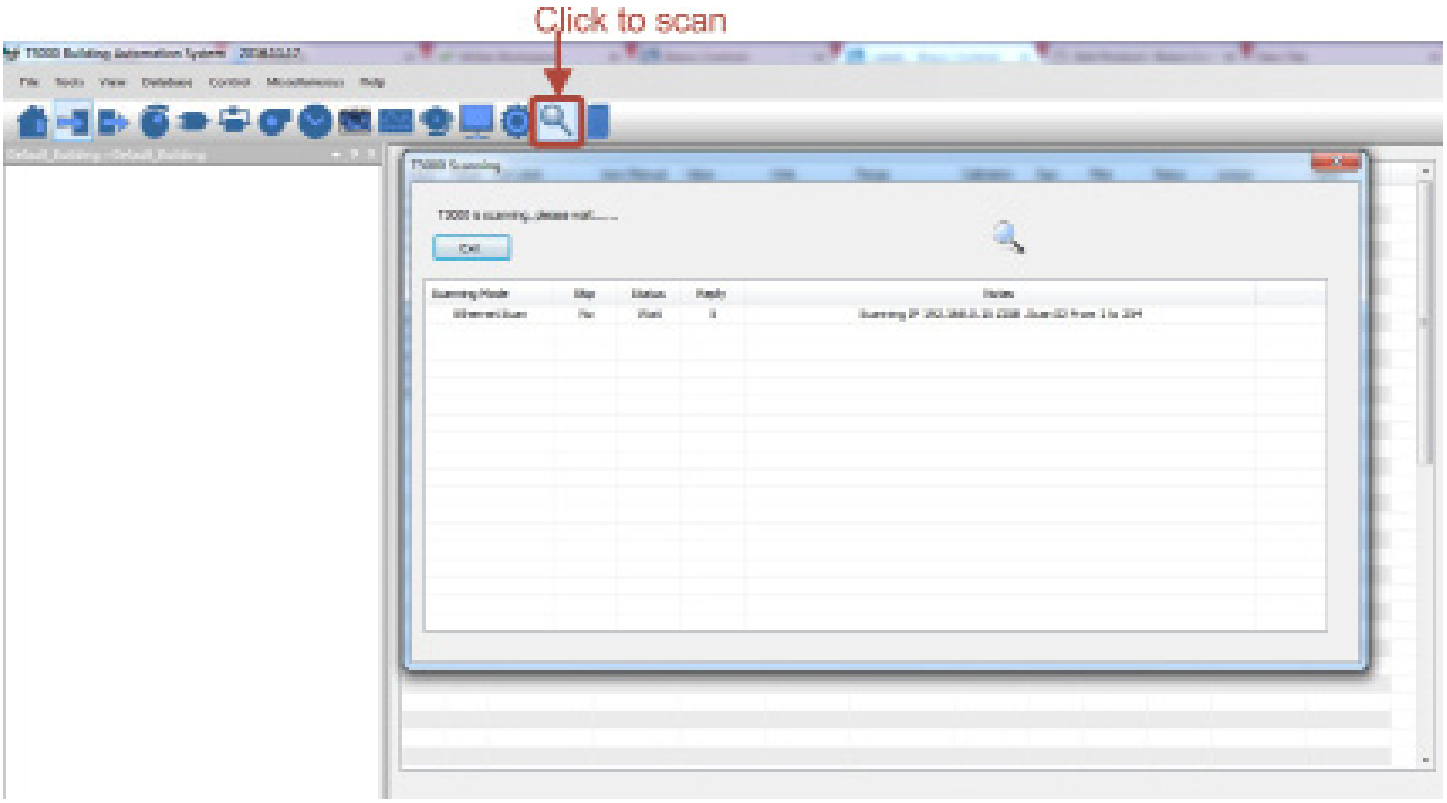
T3E-PT12 WIRING DIAGRAM
(10K)

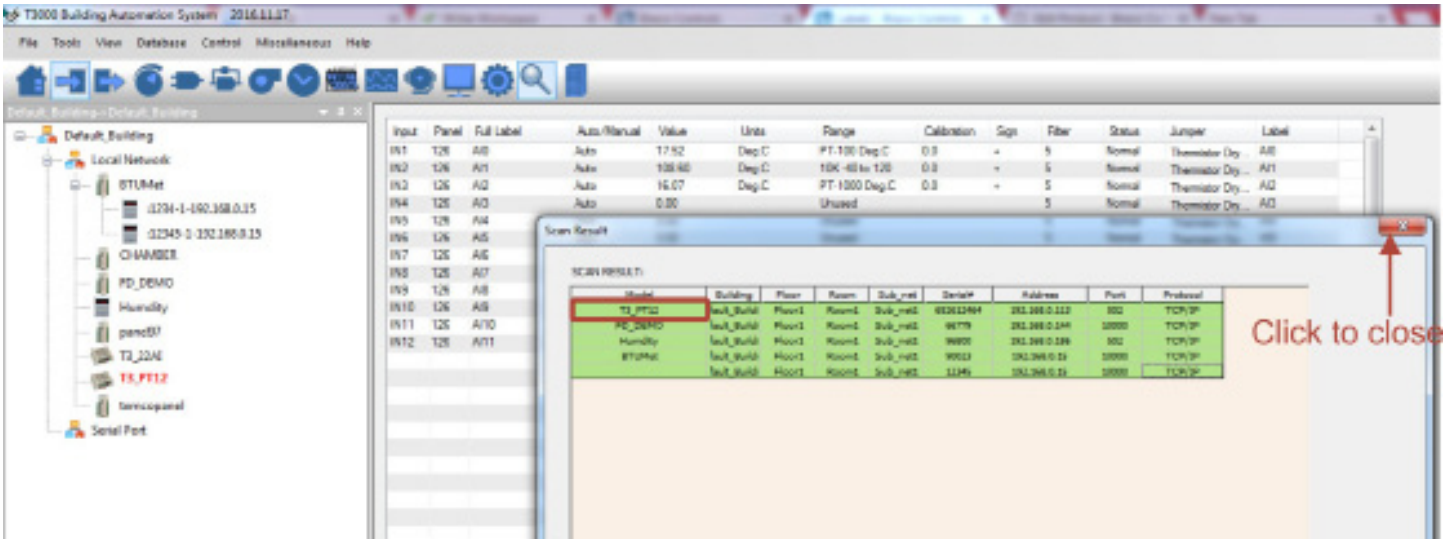


1: There are eight connectors including RTD1 to RTD8 which support 2, 3 and 4 wire sensors.
2: Due to limitations on the space, the four other connectors including RTD9 to RTD 12 only support 2 and 3 wire connections.
3: The RS485 port has two connectors, one typiocally for upstream devices and the other for down-stream devices. These two connectors are internally tied together.

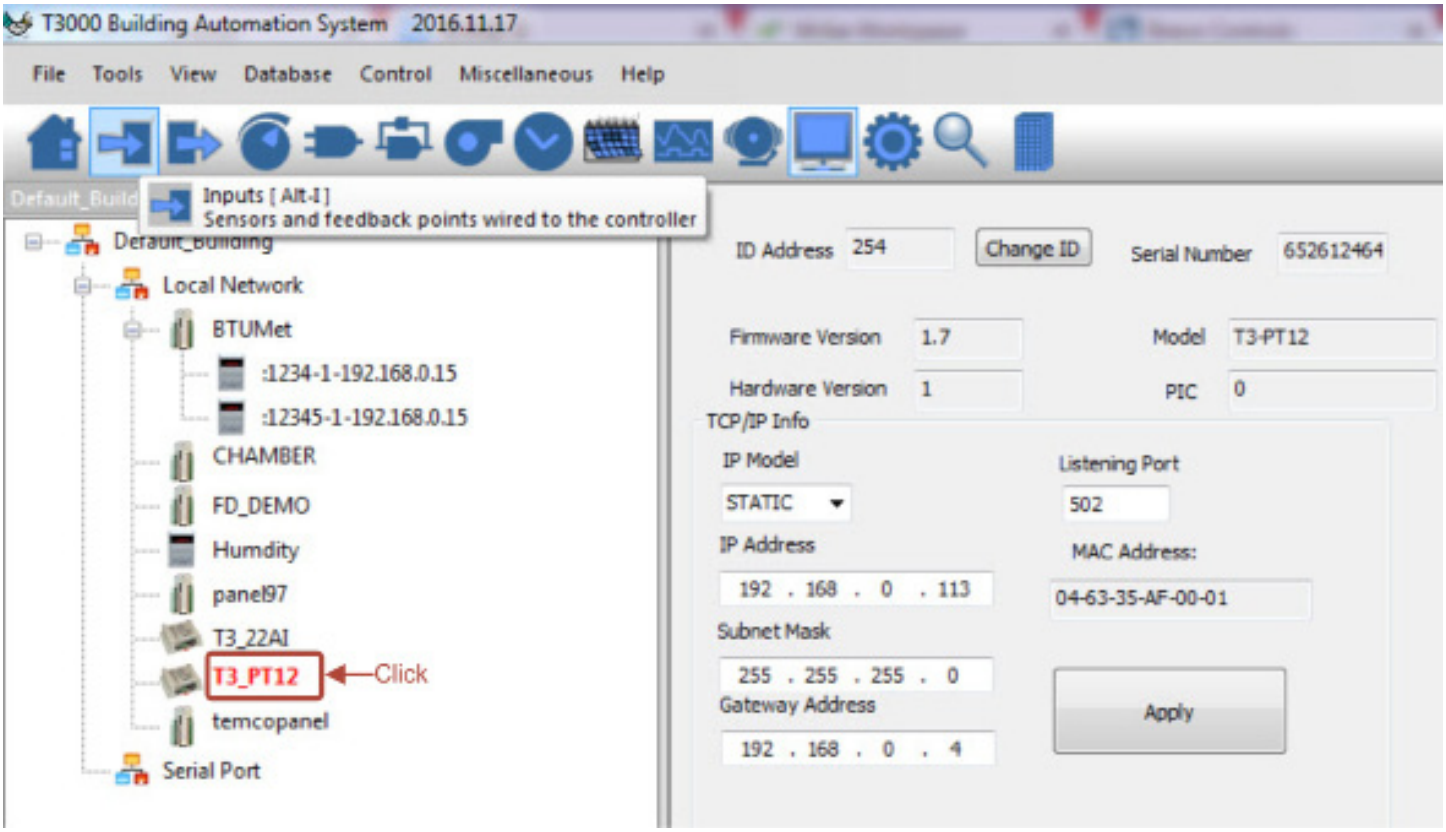
T3000 Operation

1). Connect sensor T3E-PT12 to PC by RS485.
2). OPEN T3000 and click the button to scan. The following view will appear then close it as the picture shows.





3). Click T3E-PT12 log and the T3000 will show all the information.



4). Click the Range ‘PT-100Deg.C’ log and the T3000 will show the information.