Bacnet Boiler Controller

Description

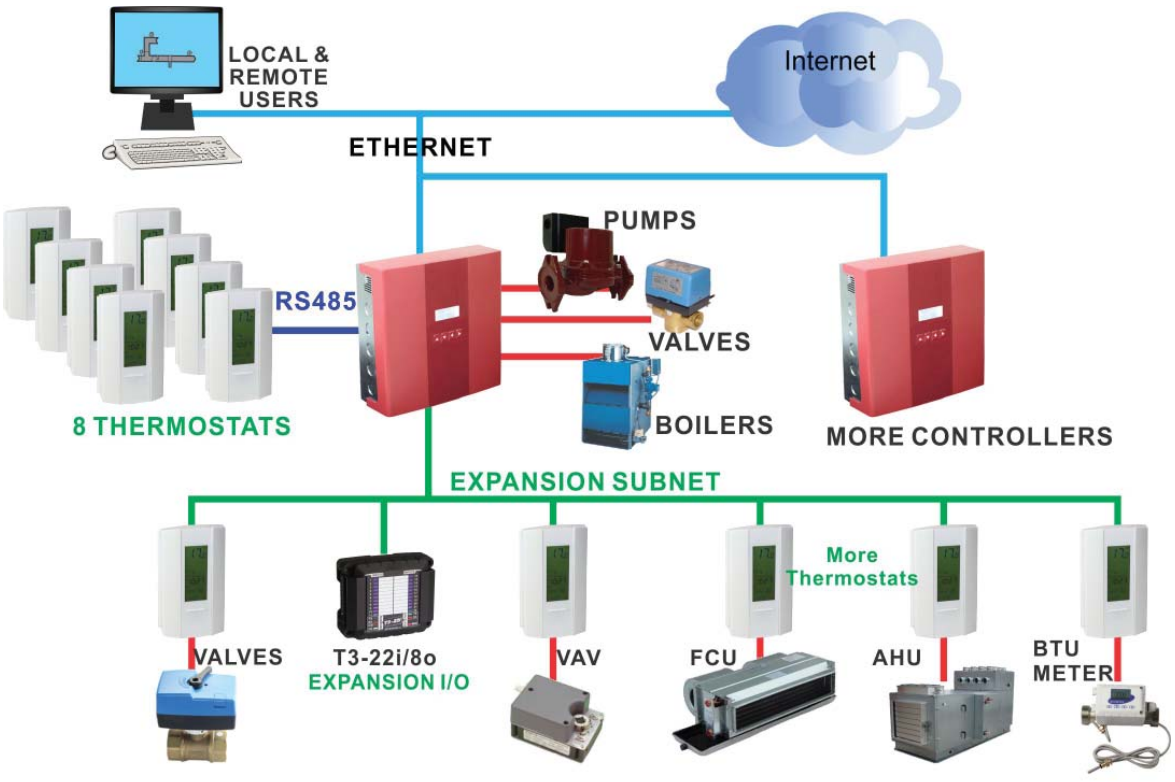
Bacnet boiler controller is a full featured heating system solution for radiant heating and more. The unit can manage up to eight zones in a simple stand alone application or can be networked into much larger systems.

The sets a new benchmark in the price/performance bringing full fledged building automation features to a whole new class of smaller buildings.

Access homes & buildings from a PC or over the net to monitor performance, increase comfort all while saving energy.

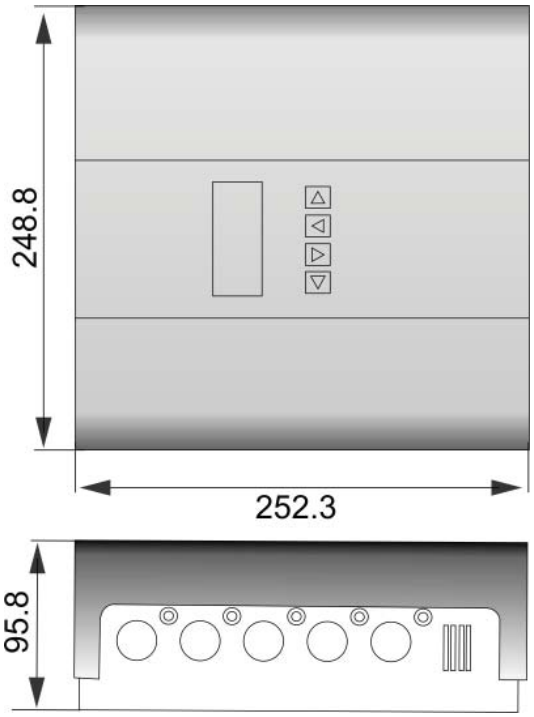
Network System

1. Contractor friendly installation
2. Screwless terminals for low voltage i/o
3. High voltage pumps connect directly no external relays to install & wire
4. Transformer, fuse & termination all in one box
5. Baseplate is passive all electronics are in the removable lid
6. No messy connections, 94 terminals total
7. 10 pluggable relays for low or line voltage switching
8. 16 universal inputs for sensors. 8 digital inputs or 8 tstats which can be choosed by adjust jumper
9. 8 thermostats direct connect over RS485, more via subnet or by adding more boiler controller.
10. LCD display for alarms and setup
11. Open source front end software, free download and no licensing fees
12. The boiler controller supports bacnet and modbus over all of the ports
13. Bacnet over ethernet TCP and RS485 MSTP, Modbus over IP and RS485 RTU

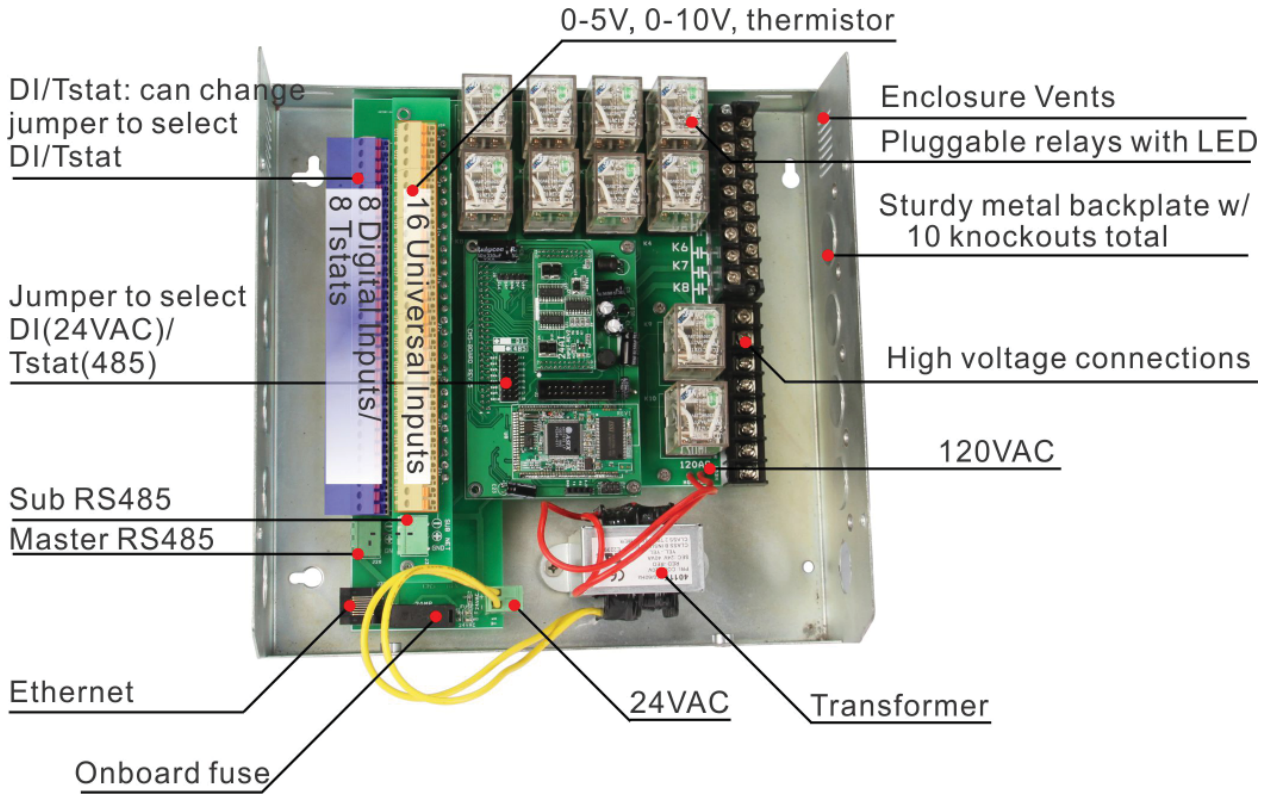


Specifications

Zones	8 thermostats; 8 zone valves/pumps; 2 equipment relays
Dimensions	250mm wide x 250 mm tall (10 x 10in)
Enclosure Base Material	Galvanized steel
Enclosure Cover Material	PC, UL flame rated
Approvals	CE, FCC part15, UL(C) coming soon
Temp Rating	0-50C, 32-122F
Power Supply	120V+/- 10%, 60Hz
Power Consumption	1va for ZC101
Aux Power Output for valves & stats	XX va with standard 17 va transformer XX va with optional 40 va transformer
Relay Ratings	8 Zones 220VAC @ 10A each, max 20A combined. 2 Equipment relays, 220VAC @ 10A each
Inputs	-8 zone thermostats (RS485)/8 ditigal inputs(24VAC), adjusted by jumper. -16 universal inputs, configured by software 5V, 10V, thermistor
Communications	Main net: Rs485, 19.2k baud; Subnet Rs485 port, 19.2k baud
Ethernet	Requires optional T3-NC router
Protocol	Modbus RTU, well documented for integrators
Front End	Windows application; Written in MS Visual Studio 2010 C++; Open source
Warranty:	1 year

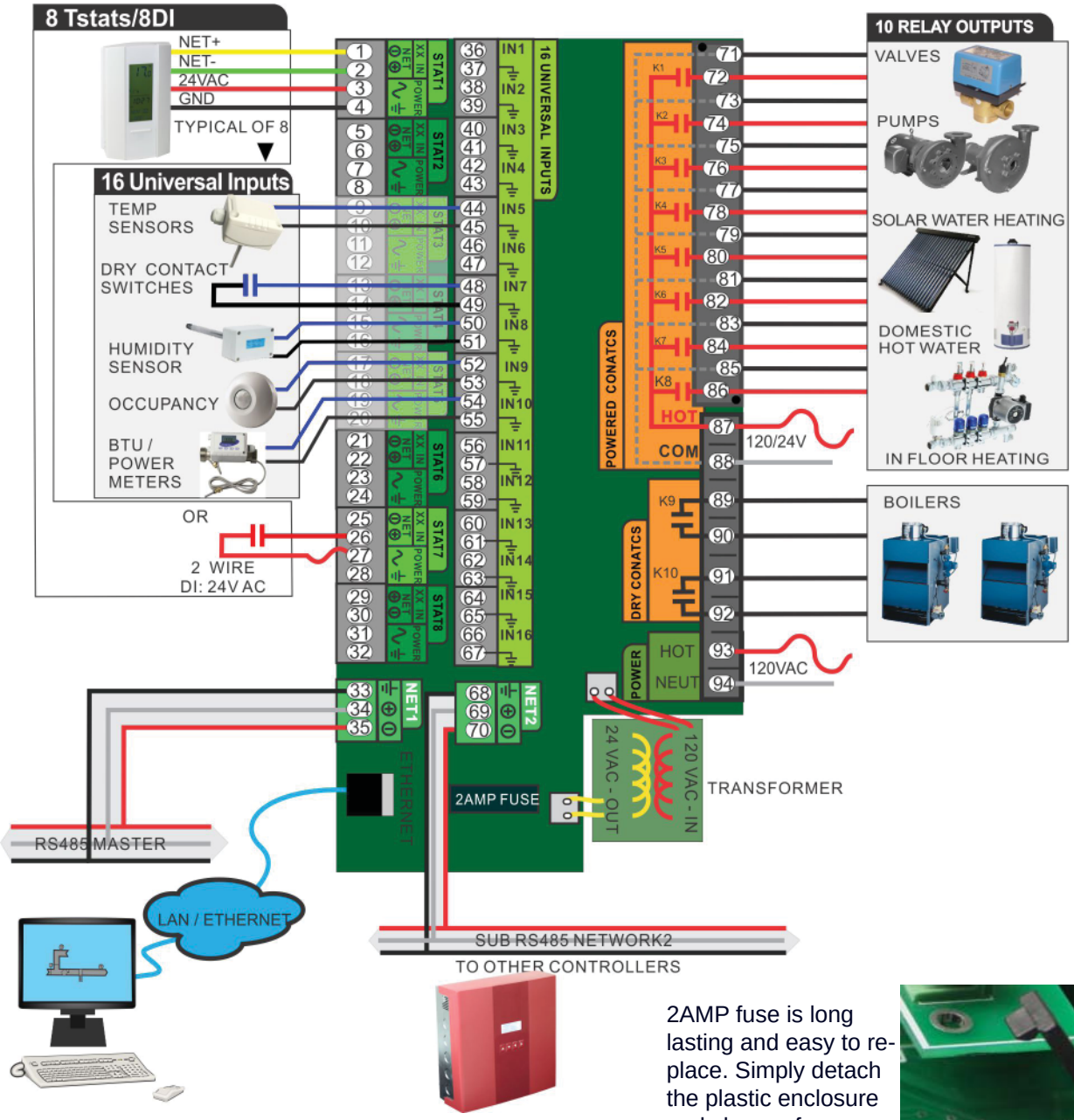


Equipment Features

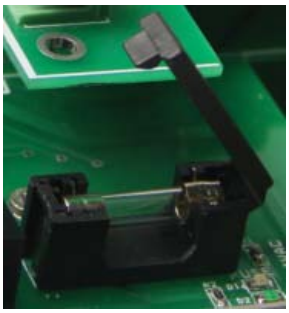


Typical Wiring Diagram

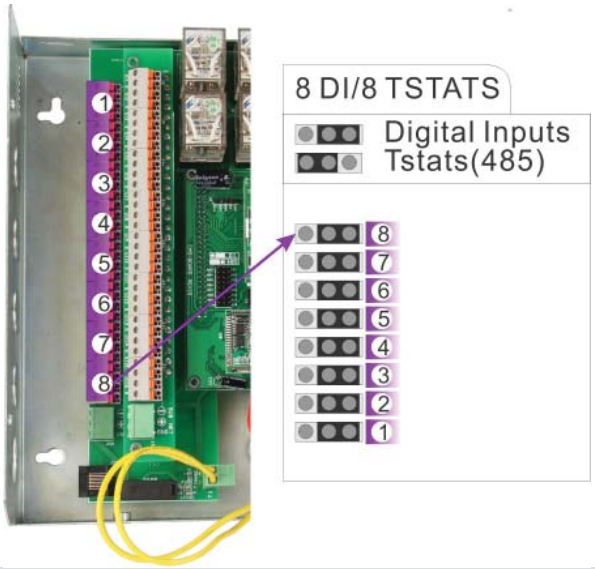
Boiler controllers have many applications. There are 8 thermostats(over RS485) or 8 digital inputs(24VAC) from terminal 1 to 32 which can be adjusted by jumper. Also there are16 universal inputs from terminal 36 to 67 which can be configured by software to the signal of 0-5V, 0-10V or therminster. it can operate many functions. What's more, not only meet your needs, also exceed your expectations.



2AMP fuse is long lasting and easy to re-place. Simply detach the plastic enclosure and change fuse.

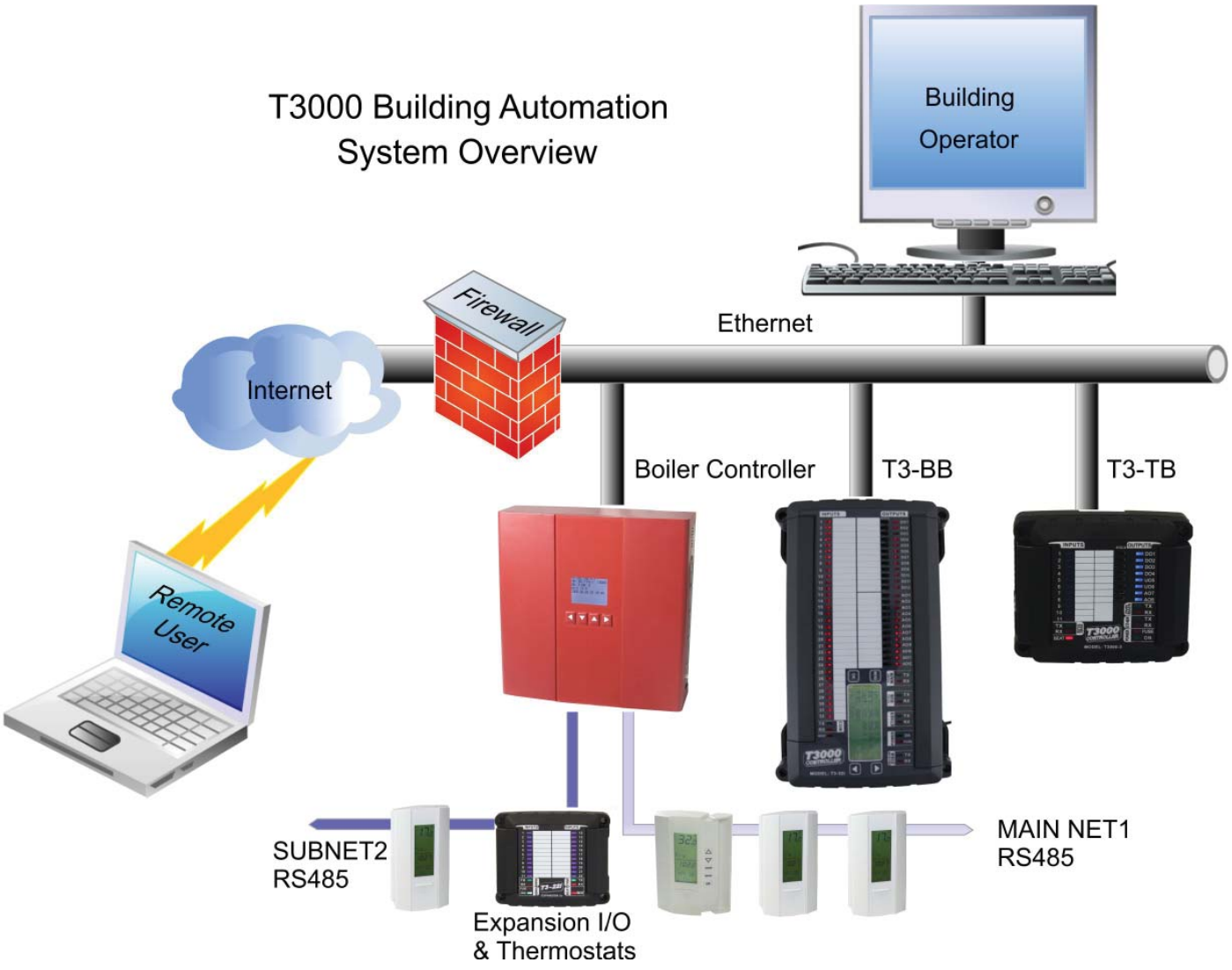


4-wire tstat(over 485) or 2-wire DI(24VAC) can be adjusted by each jumper as right the diagram displayed.



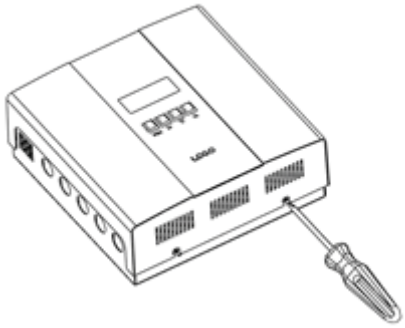
T3000 Building Automation System Overview

This diagram shows a typical small scale system with three controllers joined together over Ethernet. There is no practical limit to the number of devices that can be on this network, vast systems can be constructed using industry standard network gear. The system also supports legacy RS485 backbone cabling though the communications will be much slower than with Ethernet.

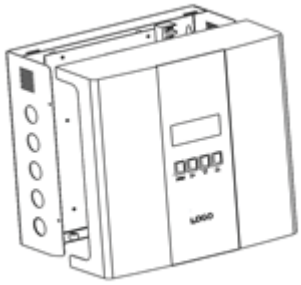


Installation Mounting

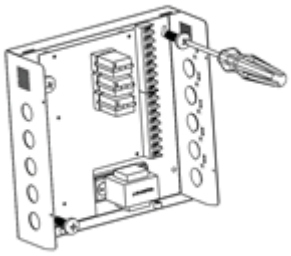
1)Unfasten screws at base.



2)Remove top plate from bottom.



3)Screw into mounted area.



4)Re-attach top plate.

5)Re-fasten screws at base.