**NT-SSA32/CLK Net/X Network Controller**

**Non-Expandable**

- **CONTROL UP TO 32 SERIAL-STATS**
- **REAL-TIME CLOCK/CALENDAR**

**(2) RS-232C Ports**

**GENERAL DESCRIPTION**

The NT-SSA32/CLK network controller supports up to 32 Net/X thermostats. The NT-SSA32/CLK includes a real-time clock/calendar that allows simple, yet robust environment control. The network controller enables simple integration with any control system, automation system or personal computer. Two RS-232C ports are included for dual connections to local and remote needs. Removable screw terminals are included for power and the Net/X-Stat bus for communications, and a serial cable is included for RS-232C connection. The NT-SSA32/CLK accepts simple ASCII commands using a published open protocol and replies with readable text answers. The entire family of controllers has built-in intelligence to correct illegal thermostat settings that might damage equipment.

**Standard Features**

**Hardware**
- Two RS-232 Serial Ports; Two Net/X-Stat Communications Ports
- Allows full control of up to 32 thermostats on each adapter
- No additional hardware needed at the thermostat
- Any Net/X-Stat can be up to 1000’ away; Combined total of 4000’ for all thermostats
- Any mix of home-run, daisy-chain or multi-drop wiring can be used
- Only two wires needed for communications with the thermostat using CAT5 cabling
- Advanced protection circuitry for data inputs/outputs; All input/output/power on removable connectors
- Non-volatile clock/calendar setpoint memory
- Integrated Real-Time Clock/Calendar allows hundreds of scheduled programs

**RS-232 Features**
- One port connects directly to any PC or control system
- One port connects directly to the NT-MODEM External Modem or NT-LAN232 Ethernet Adapter

**Software/Manuals**
- Open ASCII Protocol allows custom software development
- ASCII Protocol Summary and complete Protocol Manual available
- Installation Manual included; Pre-wire Manual available
- NetworkThermostat Command Center, Windows-based software included
- All Manuals/Software/Application Notes available on the web site

**Note:** Specifications subject to change without notice.
SPECIFICATIONS

Rated Voltage: 16VAC nominal, +/- 20 %
Rated A.C. Current: 200 mA maximum
Indicator LEDs:
- PWR (power) blinking - normal operation;
  steady - system interruption occurred
- SS (Net/X-Stat) flashing - transmission in progress
Dimensions: 3.6" H x 6.25" W x 7/8" D (91mm x 159mm x 22mm)
Power Terminations: 16VAC - power, 16VAC(c) - power common
Communication Terminations: X1 – Data(+); X2 - comm(-)
RS-232 Terminations:
1) LAN/Modem - 9-Pin Female D-Sub, pins 2, 3, 5, 7 & 8 opt. (RTS/CTS)
2) Computer - 9-Pin Male D-Sub, pins 2, 3, 5, 7 & 8 opt. (RTS/CTS)

Typical Wiring Diagram

NT-SSA32/CLK Controller
Two (2) XBUS Communications Port for up to 32 Net/X Thermostats

NT-MODEM or NT-LAN232 (cable supplied with Product)
PC or Control System (cable supplied with Controller)

NT-PWR16
Transformer (16VAC, 20VA)
(supplied with controller)

NT-PWR24
Transformer (24VAC, 20VA)
(One NT-PWR24 will power 8 thermostats)

up to 4 terminal boards
up to 32 Net/X Thermostats

Sco Pro-Wiro Diagram for alternate wiring configurations.

NT-TB or TBC Terminal Board