NT network thermostat

RP32HE-IP

Ethernet (10/100Mbps) Thermostat with Humidity Control

**Standard (Gas/Electric) up to 2H/2C
Heat Pump up to 3H/2C**

**7 Day Programmable ~ 4 Events/Day
40 Special Event Schedules
40 Calendar Event Schedules**

**Integrated Web Server
Secure Direct Connection via any LAN
Network and the Internet**

DirectConnect™ & CloudConnect™ Included

GENERAL DESCRIPTION:

The RP32HE-IP is an Ethernet networkable thermostat with humidity control, designed for new or replacement commercial or residential applications. With integrated logic for both conventional and heat pump applications, the thermostat controls up to three (3) stages of heating and two (2) stages of cooling as well as *humidification* and *dehumidification* control. Using your favorite browser, Net/X™ makes it simple with near effortless setup of your daily schedules and vacations. The powerful integrated web server allows scheduling of up to 4 events per day, plus up to 40 Special Events and 40 Calendar Events, and the unique scheduling structure also supports the powerful features of adjustable temporary override times and temperature ranges, occupied and unoccupied events, keypad lockout and many more features. Each stand-alone thermostat includes integrated weather, email and text message alerting for both customer and service personnel. *If remote sensing is needed, use the UP32HE-IP Ethernet thermostat.*

STANDARD FEATURES:

*Free Net/X-IP™ PC Software for Controlling
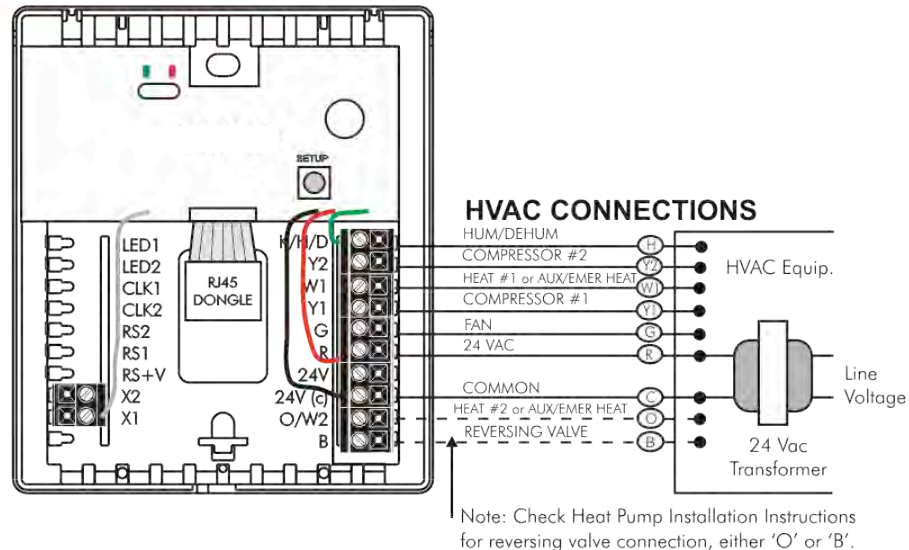Multiple Thermostats from a Single Screen*

- Integrated Web Server for Connectivity from Any Modern Web Browser
- Integrated Humidification and Dehumidification Control
- Automatic Recognition of Browser Resolution and Formatting for Specific Screen Sizes
- Email & Text Message Alerting for up to 4 Recipients; Alerts include Hi/Lo Temps for Indoor, Outdoor, Inefficient Equipment Runs and Change Filter Notifications.
- Integrated Net/X™ API, Allowing for Development of 3rd Party Apps
- Selectable Fahrenheit or Celsius Display
- Automatic Changeover from Heat-to-Cool and Cool-to-Heat
- Fan Selector for Automatic or Continuous Fan Operation; Programmable Recirculation Fan
- Vacation Button for Extended Override with Selectable Length, Start and Return Time
- Resume Button for Cancelling Temporary and Vacation Functions
- Commercial Lockout with Programmable Temporary Override Time and Temp Adjustment
- 3 LED lights; 1 for E-Heat indication and 2 for status indication
- Up to 4 independent schedules per day, programmable via communications
- Up to 40 Special Events for one time events, programmable via communications
- Up to 40 Calendar Events for vacation events, programmable via communications
- Adaptive Recovery for Schedules allows system to achieve desired setpoint at the beginning of the schedule
- Random Restart on power up randomly staggers restart of HVAC system after a power outage to minimize peak in-rush current for a facility
- Efficient Equipment Restart™ randomizes equipment starts to minimize multiple units turning on simultaneously when there are multiple UP32 and/or RP32 thermostats at the location
- Integrated Weather Current Conditions and 7-Day Forecasts

Made in USA

SPECIFICATIONS:

Rated Voltage:	20V to 30VAC, 24VAC nominal
Rated A.C. / D.C. Current:	0.05 to 0.75 AC / 0.0 to 0.75 DC Amp continuous, per output, surges to 3 Amps max.
Control Range:	**Heating:** 38 to 88°F (6 to 30°C) in 1° steps **Cooling:** 60 to 108°F (16 to 40°C) in 1° steps
Thermostat Sensing Range:	20 to 124°F (0 to 48°C)
Control Accuracy:	+/-1°F @ 68°F (0.5°C @ 20°C)
Minimum Deadband:	(between Heat and Cool) 2°F (1°C)
Humidity Control Range:	**Humidify:** 10% to 60%RH in 5%RH steps **Dehumidify:** 35% to 75%RH in 5%RH steps
Communications:	Ethernet (10/100Mbps)
Dimensions:	4.5"H x 4"W x 1"D (114mm x 102mm x 26mm)
Thermostat LEDs:	Red – Emergency Heat, Yellow – Inefficient Equipment Run, Green – Change Filter
Equipment Terminations:	R - 24V switching voltage, W1 - Heat1 or Aux/Emer Heat, G - Fan, Y1-Compressor1, Y2 - Compressor2, O/W2 - Heat2 or Rev. Valve in Cooling, B-Rev. Valve in Heating K/H/D – Humidification, Dehumidification, Aux Relay
Power Terminations:	24V - remote power (not used), 24V(c) - power common (from HVAC equipment)

WIRING DIAGRAMS:

HVAC CONNECTIONS

Note: Check Heat Pump Installation Instructions for reversing valve connection, either 'O' or 'B'.

OUTPUT TERMINAL FUNCTIONS

K/H/D Humidification, Dehumidification or Aux Relay

Y2 Energizes compressor for second stage cooling, or for heat pumps, either second stage heating or cooling

W1 Energizes heater for first stage heating, or for heat pumps, aux/emer heat

Y1 Energizes compressor for first stage cooling, or for heat pumps, either first stage heating or cooling

G Energizes fan circuit with a call for heating or cooling

R Independent Switching Voltage from HVAC equip

24V 24Vac

24V(c) 24Vac Common

O/W2 Energizes heater for second stage heating, or for heat pumps, energizes the reversing valve in cooling mode

B Energizes the reversing valve in heating mode

THERMOSTAT DIP SWITCH SELECTIONS

(FACTORY DEFAULT) OFF		ON
GAS / ELECTRIC	1	HEAT PUMP
ADAPTIVE RECOVERY ON	2	ADAPTIVE RECOVERY OFF
4 MINUTES (ON/OFF)	3	2 MINUTES (ON/OFF)
UNLOCKED	4	LOCKED
DIP1=OFF : ELECTRIC DIP1=ON : HP NORM	5	DIP1=OFF : GAS HEAT DIP1=ON : HP DUAL FUEL
1-STAGE CONTROL	6	2-STAGE CONTROL
+/- 3F OVERRIDE RANGE	7	+/- 5F OVERRIDE RANGE
NOT USED (OFF)	8	NOT USED (KEEP OFF)

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