



J5-IP-B / J5-IP-W

- Commercial Touchscreen Ethernet Thermostat
- Standard (Gas/Electric) up to 2H/2C
- Heat Pump up to 3H/2C
- Humidity Sensing & Dehumidification Control
- NetX Internal Expansion Port
- 7 Day Programmable + 80 Calendar Events
- Onboard Data Logging
- BACnet/IP, Modbus TCP/IP Embedded

GENERAL DESCRIPTION:

The J5-IP-B (black case) and J5-IP-W (white case) are Ethernet touchscreen thermostats, designed for new or replacement commercial and residential applications. Use the J5-IP for either conventional or heat pump applications (Gas/Elect 2H/2C, HP 3H/2C) with Roof Top, Split, FCU, and other equipment types. The J5-IP also has a revolutionary NetX Expansion Port for the NetX CO2 sensor, NLC Lighting Control, or other future accessories. The powerful processor allows near effortless setup of your daily schedules (4 events per day) and up to 80 Calendar Events (40 Special and 40 Calendar). The unique scheduling structure also supports the powerful features of adjustable temporary override times and temperature ranges, occupied and unoccupied events, touchscreen lockout, and many more features. In addition to the powerful NetX ecosystem, the J5-IP also includes full both Modbus TCP/IP and BACnet/IP over Ethernet, directly on the thermostat.

The J5-IP is designed to operate with our NetX-Cloud™ Online Management software and/or behind your firewall using DirectConnect™ to the embedded web server. With all functions stored in the thermostat, the J5-IP will continue to operate even during network outages, allowing you to maintain your energy savings. For ultimate control over energy usage, the J5-IP offers a digital lockout that can permit limited temperature overrides based on your requirements. The on-board data collection allows for historical review, sub-metering, and run-time reporting.

Complete Stand-Alone Solution

STANDARD FEATURES:

Energy Savings

- Efficient Equipment Restart™ randomizes equipment starts to minimize multiple units turning on simultaneously when there are multiple NetX thermostats at the location
- Random Restart on power up staggers restart of HVAC system after a power outage to minimize peak in-rush current
- Adaptive Recovery for Schedules allows system to achieve desired setpoint at the beginning of the schedule

Monitoring

- NetX Expansion Port for CO₂, NLC Lighting, and other future accessories
- On-board Data Logging with Sub-Metering Support

Connectivity

- NetX-Cloud™ Internet-Based Cloud Service
- PCConnect™ Software Local Network & Port Forwarded Access
- DirectConnect™ Integrated Web Server
- Integrated NetX™ API, Supports 3rd Party Apps
- BACnet/IP and Modbus TCP/IP over Ethernet (use either or both)

NetX-Cloud™ & CloudManager™ Available

Facility Management

- 4 independent schedules per day
- 80 Additional Calendar Events (40 Special and 40 Calendar)
- Commercial Lockout with Programmable Temporary Override Time and Temp Adjustment
- Min/Max Heating and Cooling Restrictions
- Email & Text Message Alerting for up to 4 Recipients
- Alerts include High/Low Temps for Indoor, Outdoor, Inefficient Equipment Operation, Change Filter Notifications, and more

General

- Sleek Black Touchscreen Display with White Icons, Black or White Case
- Modes: Heat, Cool, Automatic Changeover
- Integrated Humidity Sensing and Dehumidification Control
- Fan Selector for Independent Fan Control
- Programmable Recirculation Fan
- Integrated Weather with Current Conditions and 7-Day Forecasts
- Embedded Web Server with responsive design allowing access from any device with a browser



SPECIFICATIONS:

Rated Voltage: 20-30 VAC, 24 VAC nominal

Rated A.C. / D.C. Current: 0.05 - 0.75A AC, 0.0 - 0.75A DC continuous, per output, surges to 3 Amps maximum

Temperature Control Range: **Heating:** 38°F to 88°F (4°C to 31°C) in 1° steps
Cooling: 60°F to 108°F (16°C to 42°C) in 1° steps

Thermostat Sensing Range: 32°F to 118°F (0°C to 48°C) **Control Accuracy:** ±1°F @ 68°F (±0.5°C @ 20°C)

Minimum Deadband: 2°F (1°C)

Dimensions: 5.1"H x 3.25"W x 1.08"D (130mm x 82.5mm x 27.4mm)

Mounting: Single Gang Vertical Mount, Standard 3 9/32" Screw Hole Spacing

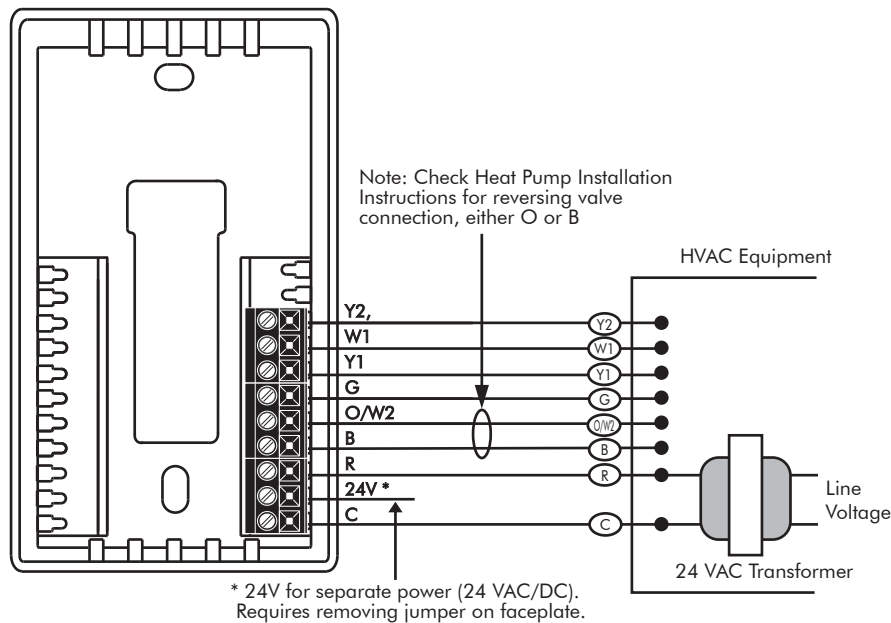
Equipment Terminations: R - 24V Switching Voltage, G - Fan, Y1 - Compressor 1, Y2 - Compressor 2, W1 - Heat 1 or Aux/Emer Heat, O/W2 - Rev. Valve Cooling or Heat 2, B - Rev. Valve in or Heating

Power Terminations: R - 24V Switching Voltage (from HVAC equipment), 24V - Separate Power (24 VAC/DC) requires jumper removal, C - Power Return (from HVAC equipment)

Ethernet: 10/100Mbps, 802.3, Auto Negotiation, Auto-MDIX

Internal Expansion Port: NetX Expansion Port for NetX CO₂ Sensor, NLC Lighting Control, NetX future accessories

WIRING DIAGRAMS:



TERMINAL FUNCTIONS

- Y2:** Energizes the compressor for second-stage cooling, or for heat pumps, either second-stage heating or cooling
- W1:** Energizes the heater for first-stage heating, or for heat pumps, Aux/Emer (Auxiliary/Emergency) Heat
- Y1:** Energizes the compressor for first-stage cooling, or for heat pumps, either first-stage heating or cooling
- G:** Energizes the fan circuit with a call for heating or cooling
- O/W2:** Energizes the heater for second-stage heating, or for heat pumps, energizes the reversing valve in cooling mode
- B:** Energizes the reversing valve in heating mode
- R:** Independent Switching Voltage from HVAC equipment
- 24V:** 24 VAC, For Separate RC/RH, Remove Jumper on PCB
- C:** 24 VAC Common