InetSupervisor™

Q1-RTU Roof Top Unit App

Multi-Protocol: BACnet/IP and LonWorks

MADE IN U. S. A.

Applications

Application is compatible with Q1 Hardware. Compatible with Roof Top Unit equipment up to 4 stages of cooling or heating, analog or floating-point valves or digital stages, discharge pressure/variable speed fan control, economizer, humidification and de-humidification, IAQ (CO2) control.

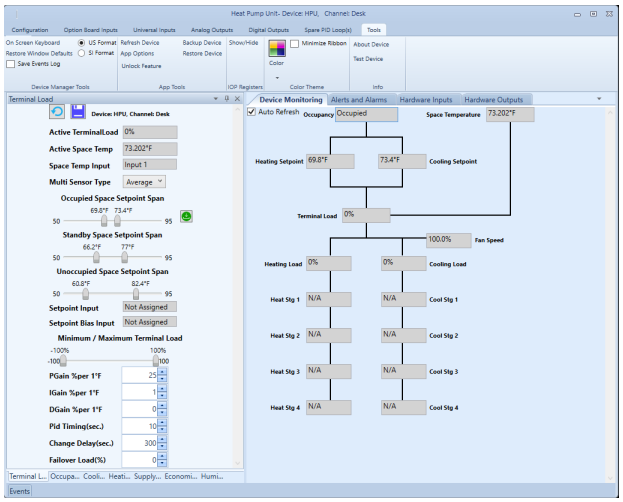
Software

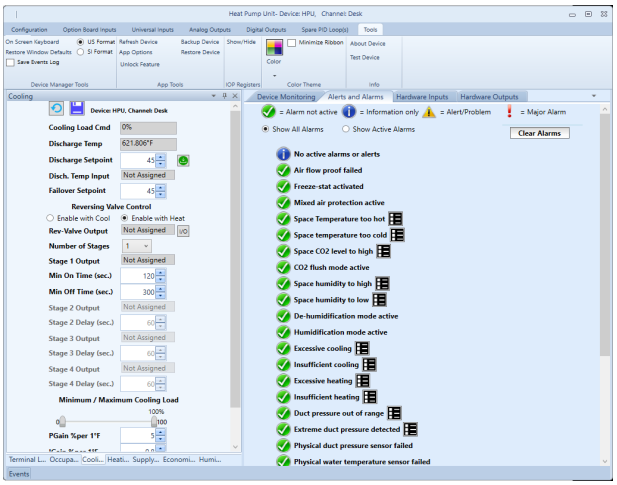
Software features include:

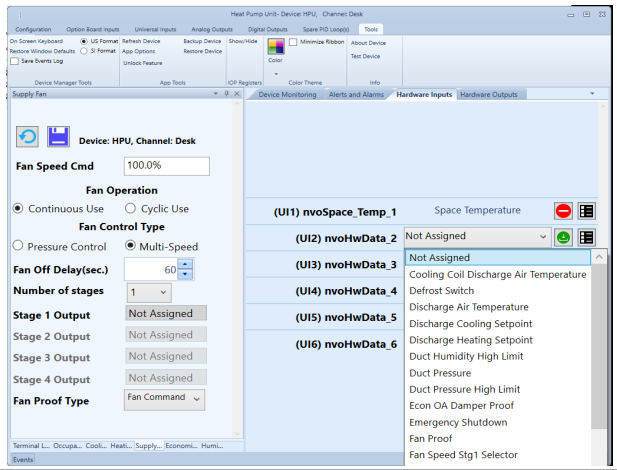
- Single Zone RTU control options
- Single or Multiple Zone temperature sensors, with the capacity to act upon maximum, minimum, or average temperature.
- Full PID control of up to 4 Independent stages of cooling, both digital and analog or a mixture of both
- Full PID control of up to 4 Independent stages of heating, both digital and analog or a mixture of both
- Electric Re-heat control
- Multiple Supply Fan control options. On/Off, Duct Pressure Control based variable speed and selector switch based speed control
- Dry-bulb and Enthalpy based Economizer with CO2 and freeze protection control
- Space Humidity Control
- Built in Energy Shedding control
- Optimum Start Capable
- Built in Alarming
    - Physical I/O Alarms
    - Fan Failure Alarms
    - Sensor Alarms
    - Temperature Control Alarms
    - Pressure Control Alarms
    - CO2 Alarms
    - Humidity Control Alarms
    - Many more
- Changeable network variable types.

Slave mode for any unused I/O, which can be bound to another controller.

LNS Plug-in provides graphical user interface for configuration and monitoring. Plug-in simplifies hardware I/O customization, communication parameters, and control sequences. Plug-in can be executed from-within network management tool such as LonMaker for Windows or similar.



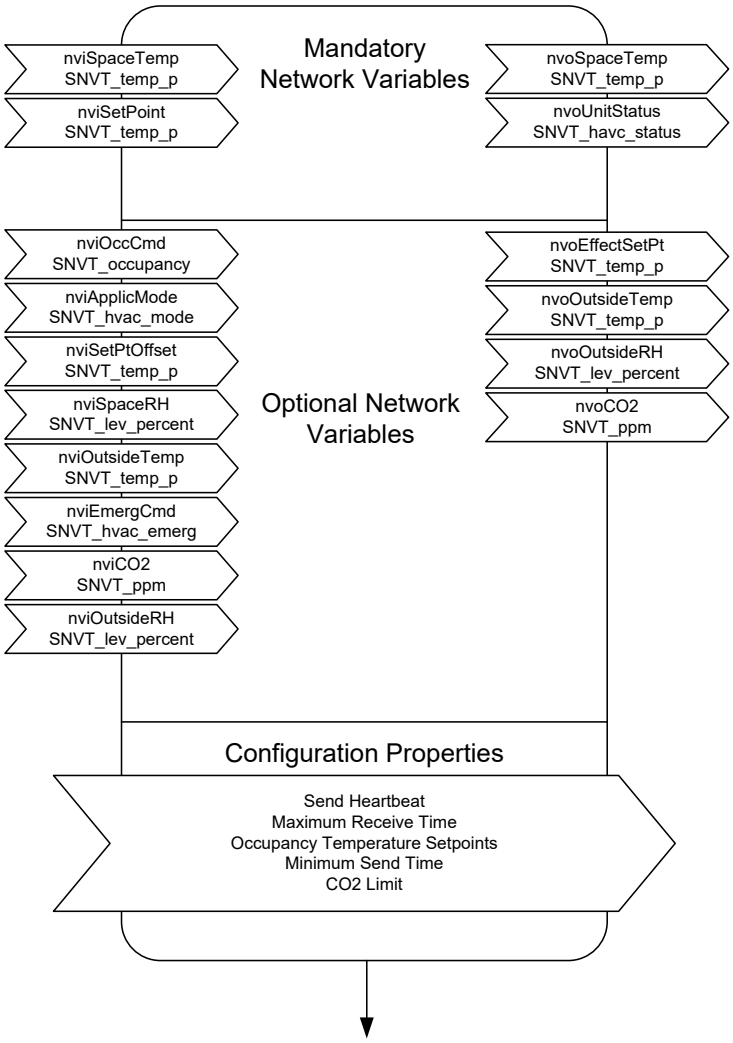




RTU 8030 Profile

All variables with SNVT_xxx have Changeable Types feature.

Network Profile



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RTU 8030 Profile

Network Profile

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Manufacture Network Variables

- nviFanSpeedCmd SNVT_switch
- nviWaterTemp SNVT_switch
- nviDischAirTemp SNVT_temp_p
- nviEnergyHoldOff SNVT_hvac_mode
- nviDuctStaticSP SNVT_press_p
- nviDuctStatPress SNVT_press_p
- nviSupFanStatus SNVT_switch
- nviTerminalLoad SNVT_lev_percent
- nviDAClSP SNVT_temp_p
- nviDAHtSP SNVT_temp_p
- nviOAEnthalpy SNVT_enthalpy
- nviEconEnable SNVT_switch
- nviOccTod SNVT_tod_event
- nviClearRunTimer SNVT_switch
- nvoDuctStatPress SNVT_press_p
- nvoOADamper SNVT_lev_percent
- nvoOAEnthalpy SNVT_enthalpy
- nvoEffDATempSP SNVT_temp_p
- nvoEffectClSetPt SNVT_temp_p
- nvoEffectHtSetPt SNVT_temp_p
- nvoSpaceRH SNVT_lev_percent
- nvoAlarmDisplay UNVT_nvoAlarmDisplay
- nvoUnitAlarms SNVT_state_64
- nvoHumidityLoad SNVT_lev_percent
- nvoTerminalLoad SNVT_lev_percent
- nvoLoadAbs SNVT_power
- nvoDischAirTemp SNVT_temp_p
- nvoHeatOutput SNVT_lev_percent
- nvoCoolOutput SNVT_lev_percent
- nvoFanSpeed SNVT_switch
- nvoReheat SNVT_switch
- nvoOccCmd SNVT_occupancy
- nvoEnergyHoldOff SNVT_switch

Manufacture Configuration Properties

- Default Occupancy State
- Default Heating Setpoint
- Default Cooling Setpoint
- Default Terminal Load
- Occupancy Bypass Time – Per Push
- Occupancy Bypass Time – Max Total
- Optimum Start Configuration
- Humidity Max/Min Setpoint
- Fan Type / Mode
- Heating PID Parameter / Stage Delays
- Cooling PID Parameters / Stage Delays
- Fan PID Parameters / Stages
- Terminal Load PID Parameters / Changeover Delay
- Discharge Temperature Alarm Configuration
- Fan Alarm Configuration
- Humidity Alarm Configuration
- CO2 Alarm Configuration
- Space Temperature Alarm Configuration
- Duct Pressure Alarm Configuration

Open Loop Sensor Profile

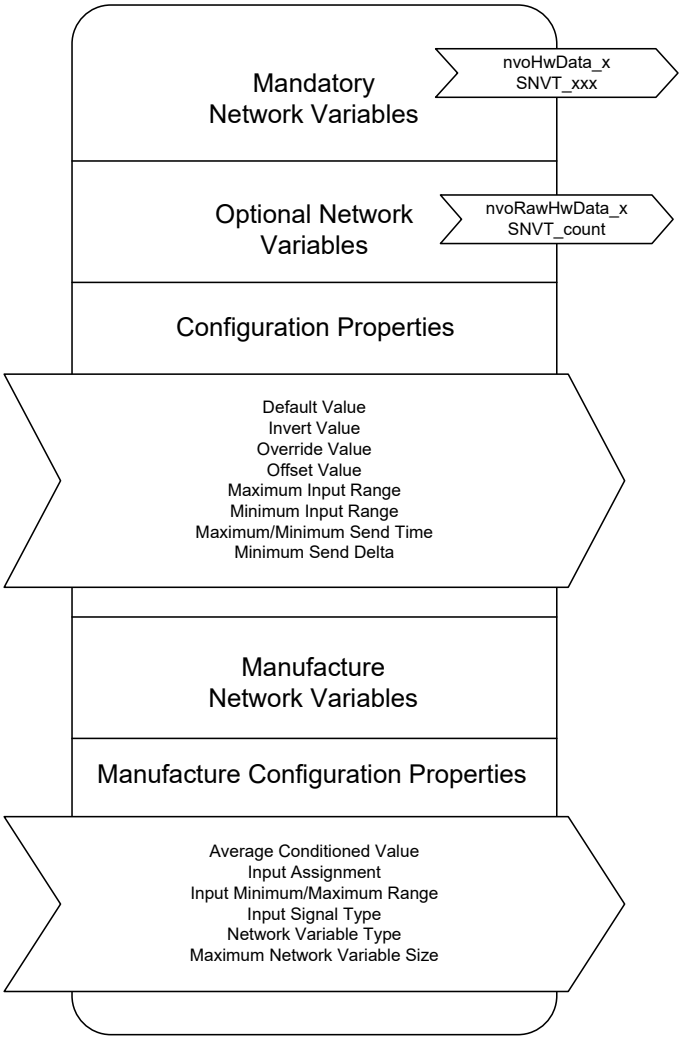
Open Loop Sensor profile is used by all physical inputs. Inputs can be used as slave I/O or as part of the main application.

All variables with SNVT_xxx have Changeable Types feature.

Network Profile

Open Loop Sensor functional block information.

(Physical inputs)



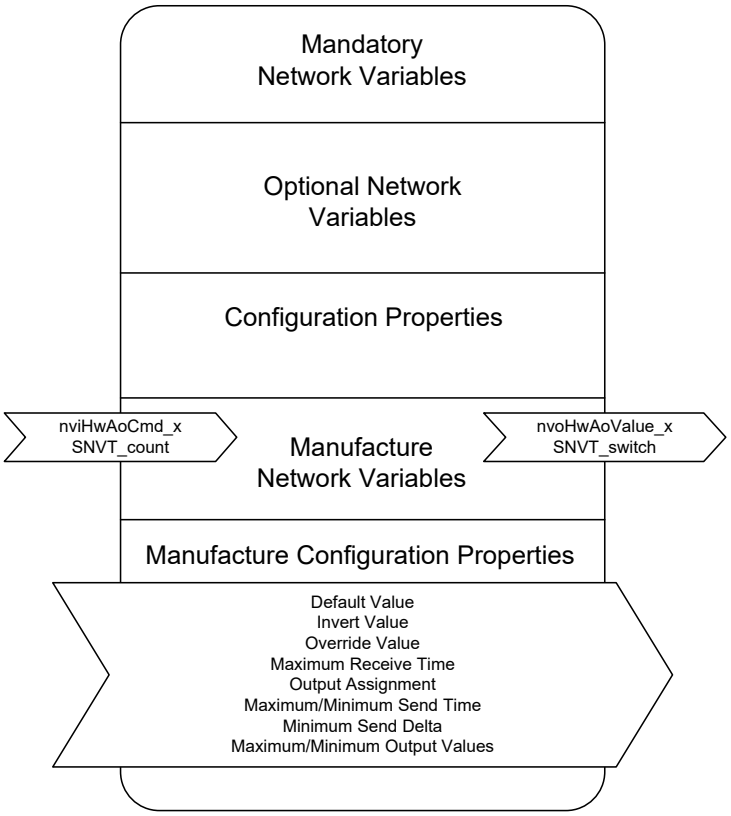
Open Loop Actuator Profile

Analog Output profile is used by all analog outputs. Outputs can be used as slave I/O or as part of the main application.

All variables with SNVT_xxx have Changeable Types feature

Network Profile

Analog Outputs functional block information.



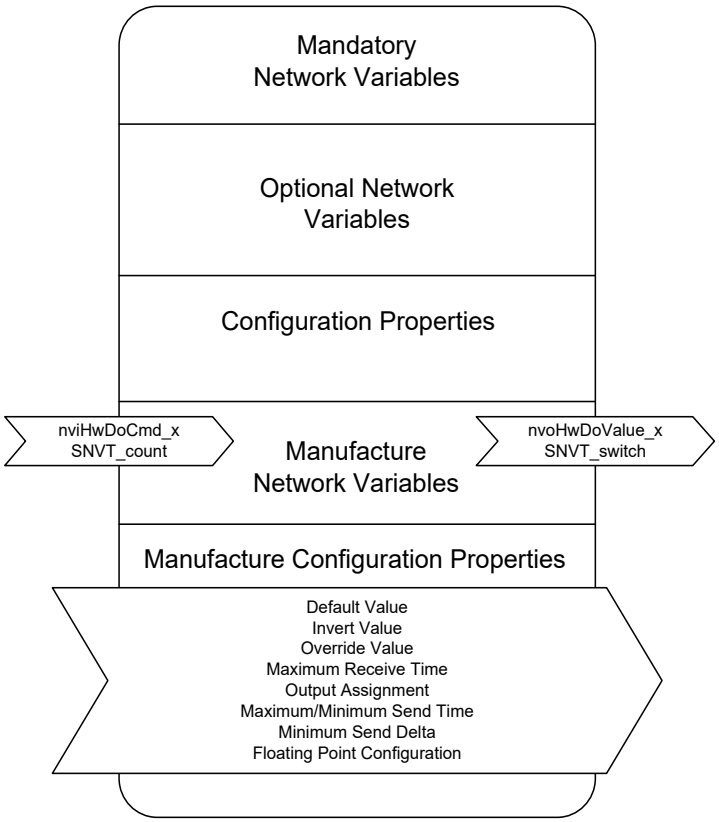
Open Loop Sensor Profile

Digital Output profile is used by all digital outputs. Outputs can be used as slave I/O or as part of the main application.

All variables with SNVT_xxx have Changeable Types feature.

Network Profile

Digital Outputs functional block information.



Node Object Profile

Node Object profile includes hardware specific network variables. The variables are for internal and use by the plug-in only.

Network Profile

Node Object functional block information.