InetSupervisor™

P3 Programmable Device

APPLICATIONS

P3 typical application includes outdoor, indoor, circadian tunable, street and high bay lighting, HVAC automation, industrial automation, compressed air system automation, etc.

DESCRIPTION, continued on page 2

P3 is a programmable device used to execute graphical programming language. P3 is typically used in a topology where network is designed with high-speed Ethernet backbone. P3 routes VA-Bus EnOcean wireless traffic to the high-level Ethernet network. Protocols used on the Ethernet network include BACnet IP, Modbus TCP*, REST IoT*, Connex, and BACnet IP. Protocols used on the floor-level networks include VA-Bus wireless, EnOcean.

To configure the P3 communication parameters, user will install the InetSupervisor Portal app application on a remote computer then perform device discovery during which all available P3 devices will show up.

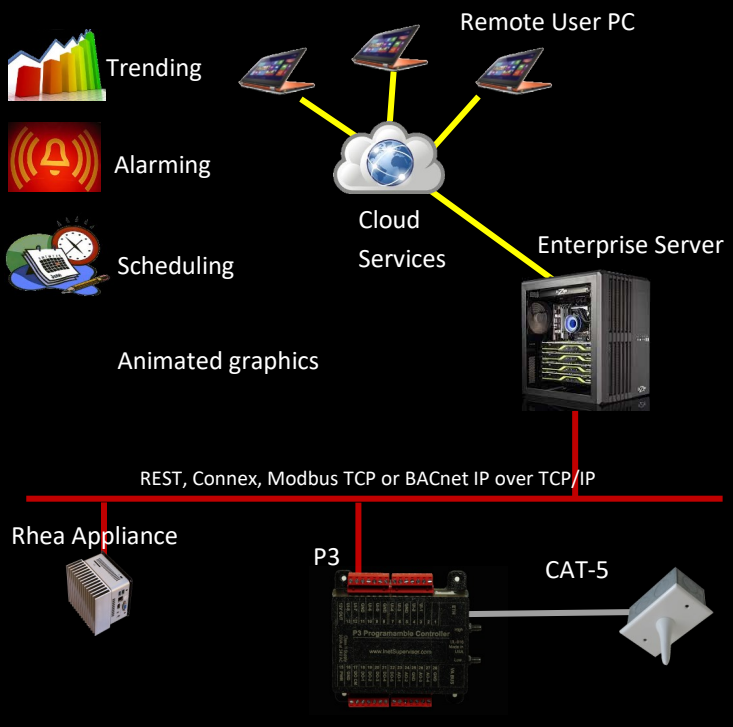
The InetSupervisor Portal app performs a function of an IDE used to create programs, debug and compile. Simply drag graphical blocks, referred to as qubits, from the library and connect them with lines which define the path of data flow. P3 poses no limit to the length or complexity of the code other than hardware memory and CPU processing speed, which is displayed during debugging.

P3 is a high performance, programmable controller with wireless VA bus connecting to a EnO – EnOcean antenna. The EnO antenna provides wireless network connectivity, an AIR-Bus. The following devices can reside on the AIR-Bus:

LedRelay (one AO and one relay), EnOcean sensors and switches, including lighting switch, temperature, CO2, humidity sensors, etc. For more, refer to the standard

PRODUCT PART NUMBERS

Part Number: **P3**



DESCRIPTION—continued

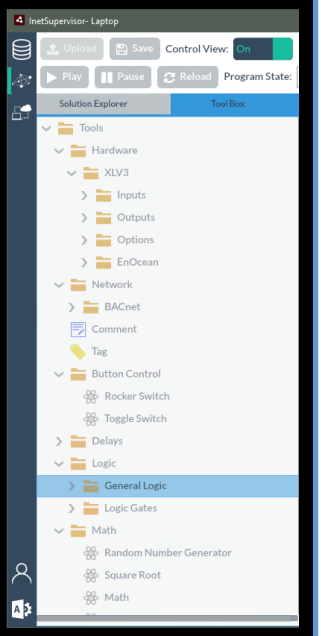
EnOcean 902MHz products.

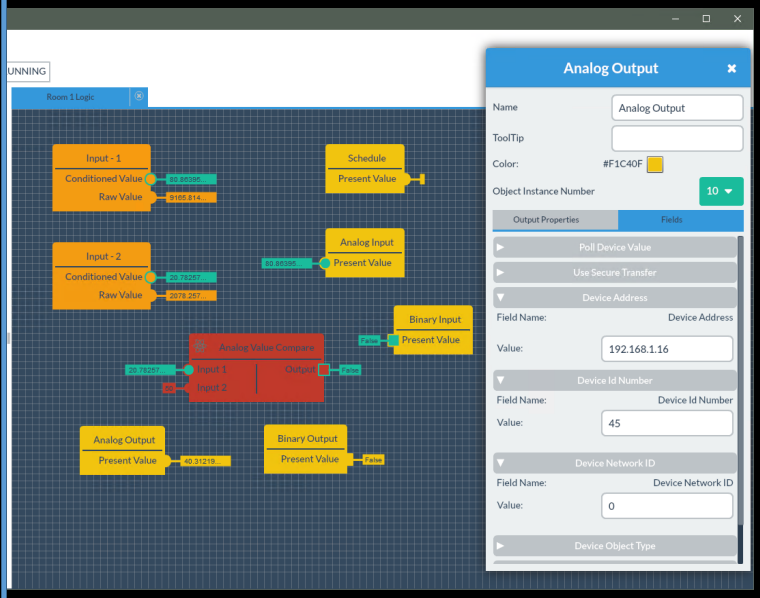
When P3 is connected to the Internet, it will use time servers to synchronize the time automatically, else the user needs to use the Portal app to set proper time.

*Future protocol support. Subject to change

Mobile App

InetSupervisor Portal app provides graphical programming interface for free programming of the I/O, and the logic. The app stores configuration for multiple P1, P2, P3 controllers and arranges it into projects. Programs can be backed up and sent for use in another project. The app currently runs on full version of windows desktops and tablets.





InetSupervisor™

P3 Programmable Device

I/O CONFIGURATION

Communication ports	
RJ-45 Ethernet:	BACnet IP, Modbus TCP, REST, Connex *Future protocol support. Subject to change
VA-BUS:	Antenna 902MHz EnOcean

INSTALLATION

P3 is typically installed into a NEMA enclosure using sheet metal screws.

AGENCY APPROVALS

Safety Certifications	UL916 Energy Management Equipment

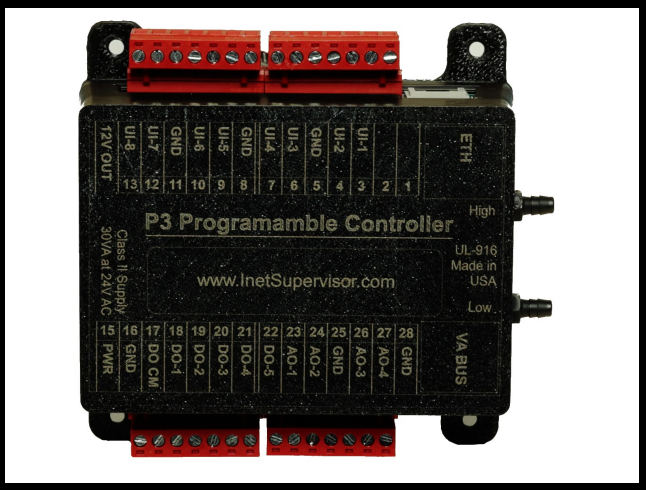
WARRANTY

Standard 2-year warranty.

UL916 RoHS

MECHANICAL

Hardware	
Processor	ARM A8, 1GHz
Storage	4 Gb flash solid state memory
Power	
Supply Voltage	18-50V DC or 24V AC
Supply Current	450mA max
Enclosure	
Material	ABS plastic
Color	Black
Installation	4x #8 Screws
Environment	
Temperature	0°-50°C (32°-122°F)
Humidity	0-90% non-condensing
Storage	-20°- 70°C (-4° - 158°F)



I/O CONFIGURATION

NOTE: No Hardware Jumpers required to configure I/O

8 x Universal Inputs	
Resistive	Thermistor 10KΩ Type II and Type III
	(Type II is recommended)
	Potentiometer with custom scaling
	Dry contact
Voltage	0-10V DC
Current	0-20mA DC
5 x Digital Outputs	
	SSR rated at 500mA @ 24V AC /DC external power supply
4 x Analog	20mA max at 30°C, 8bit resolution
	0 or 10VDC Digital / Binary
	0-10V DC adjustable , linear
1 x Pressure Sensor	
	+- 8.0" w.c. span
	22bit ADC resolution

AGENCY APPROVALS

Safety Certifications	UL916 Energy Management Equipment CSA C22.2#205 Issue 1983/06/01 (R2009) Signal Equipment standard

WARRANTY

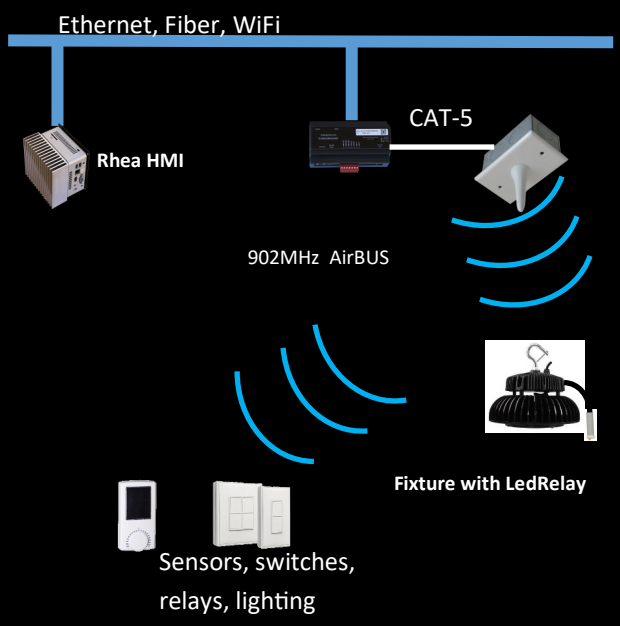
Standard 2-year warranty.

UL916 RoHS

STATUS LIGHTS

LED	
Device status GREEN	Pulsing green = Normal
	Off = No power or other fault
VA Port Comm GREEN	OFF = No Power or other Fault
	ON = No Traffic
	Blink = VA Port Traffic
Ethernet Comm Green	OFF = Not connected
	ON = Connected, No Traffic
	Blink = Ethernet Port Traffic

Typical lighting installation

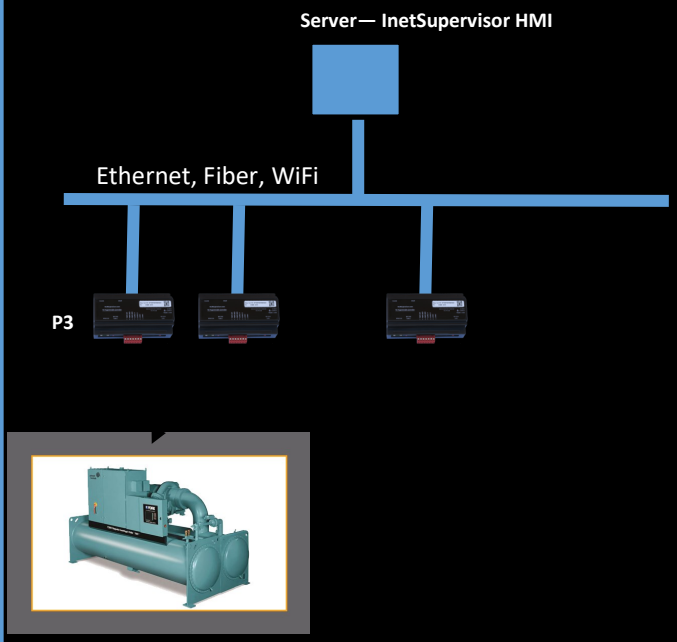


Rules of thumb:

- Antenna covers about 200ft radius, line of sight.
- P3 can service about 150 Led Relays max.
- P3 can service 1 antennas max.

Individual projects vary and the integrator may find the above rules conservative or optimistic, mostly conservative.

Typical LonWorks installation



P3 controls HVAC hardware directly using on-board physical I/O.