



Price Rooftop  
Unit Controller

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# Advanced DDC Control for Simplifying Network Strategies

The PRTU controls any rooftop unit from 1 to 4 stages of cooling and heating.

## Fully Integrated Systems

Packaged rooftop equipment is very common in industrial and commercial buildings. These units, typically ranging from 5 to 50 tons, require varying levels of rooftop control capability, from a standalone system to a completely networked system with graphical interface. A networked rooftop controller is a much more powerful controller than a standalone unit as it can gather information from the network and calculate load demands.

## Price Rooftop Unit Controller – PRTU

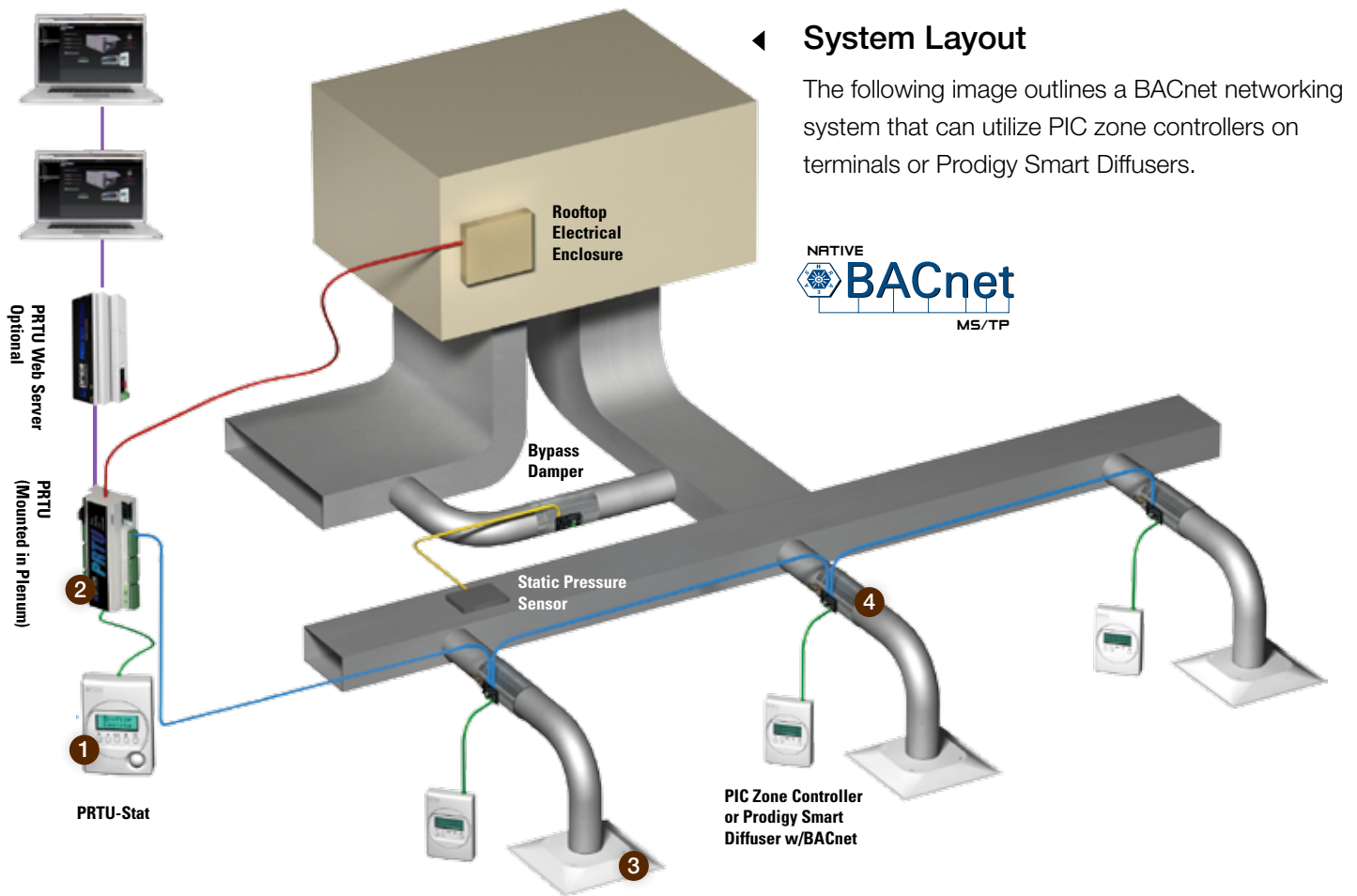
This state-of-the-art proportional integral (PI) digital controller is a reliable and technologically advanced system that provides occupant comfort and energy savings throughout an entire facility.

**The PRTU can interface with virtually any packaged rooftop unit to control the cooling and heating stages as well as the fan operation.**



## The PRTU features:

- **Up to 30 zones per Rooftop Controller.**
- 10 flexible binary outputs (24 VAC) and 4 analog (0-10 VDC) outputs allows for hookup to and control of any packaged rooftop unit.
- **The ASHRAE standard BACnet option - allows for advanced control and monitoring of a building system.**
- **Real Time Clock and Calendar** – allows for scheduling, which leads to energy savings.
- **Polling Data from Network** - controls the packaged rooftop unit based on data collected from each zone.
- **Motion Sensor Occupancy Control** - allows PRTU to automatically turn on the RTU during unoccupied times for unscheduled occupancy.
- **Optimized Staging** - eliminates offset error by suspending second stage cooling or heating when the first stage continues to meet space temperature requirements.
- **Equipment Safety Timers** - prevent outputs from cycling too fast.



## ◀ System Layout

The following image outlines a BACnet networking system that can utilize PIC zone controllers on terminals or Prodigy Smart Diffusers.

### 1 The PRTU - STAT:

- Motion sensor for automatic occupancy control.
- Scheduling with Real Time Clock and Calendar.
- 2 way communication using BACnet. communication protocol.
- Large, easy to read, backlit LCD display.

### 2 The PRTU:

- Microprocessor control of all inputs and outputs.
- All zones communicate with PRTU via BACnet MS/TP networking.
- Programmable safeties to prevent outputs from cycling too fast.
- Indicator LEDs show status of each output, including ON/OFF/Fault.

### 3 Price Prodigy® Smart Diffuser:

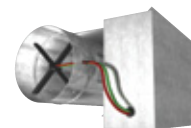
- Network is daisy chained from unit to unit.
- Can be combined with either the pressure independent PIC or the pressure dependent Price Prodigy Smart Diffuser (PPD).
- Zone controllers offer excellent local air flow control and reheat capability.

### 4 The PIC Zone Controller:



- VAV damper controller with high accuracy, low drift air flow sensor.
- Capable of controlling 3 stages of heat.
- Capable of controlling heat – cool changeover, night setback, morning warm-up, and various other sequences.
- Set-point adjustment can be done directly from thermostat

### The Bypass Damper (Pressure Control, Valve-PCV) :



- VAV damper controller, static pressure transducer and low leakage damper assembly.
- Accurately controls duct static pressure
- Ability to field adjust required static pressure.
- Networked and standalone options available.

# Access the PRTU from the Internet

## PRTU Web Server

### Access the PRTU from the Internet

Accessing your system via the internet allows worldwide access to the building for fast and easier monitoring and troubleshooting. The Price web server allows the user to view all status variables such as room temperatures, air flows, etc. for every zone controller on the network, as well as change temperature and air flow set-points right from a PC.



#### Key Features:

- Package includes IP router, BACnet router and Web Server
- Access via any web browser with free ADOBE FLASH plug-in installed
- No software or USB keys
- BACnet IP support
- High resolution graphics
- Multiple users with separate access levels

#### Basic Web Server Package (Optional):

The standard package includes:

- Links to every zone and rooftop controller
- Important details about every zone and rooftop controller displayed graphically, with equipment and ductwork illustrations and animations for on/off operations or status notifications.
- Details include such variables as:
  - Air temperatures and set-points (SAT, Room Temp.)
  - Fan Status
  - Damper positions
  - Air flow values
  - Rooftop operations

#### Custom Web Server Package (Optional):

Custom package includes all the above features from basic, plus:

- Three dimensional illustrations with customized logos, animations or photos used to improve aesthetics

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The founding principles of our company have never changed - business integrity, first-class service and a commitment to people. Price manufacturing endeavours arose from our belief that we could supply superior products and services at a reasonable price. Our mission is to become the worldwide supplier of preference for air distribution products and services. You can rely on Price – our products and services – with confidence.

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Product Improvement is a continuing endeavour at Price; therefore, specifications are subject to change without notice. Consult your Price sales representative for current specifications or more detailed information.

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