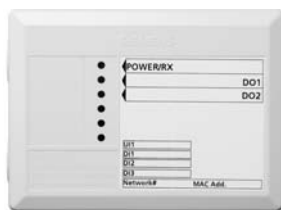
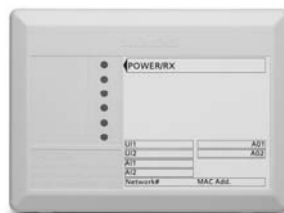


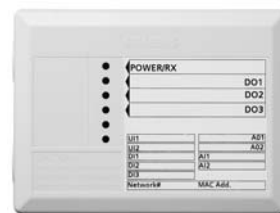
Siemens MS/TP Point Pickup Module



6 Point Digital



6 Point Analog



12 Point Combination

Description

The Siemens Point Pickup Modules (PPM) are expansion I/O devices that communicate on a BACnet master-slave/token-passing (MS/TP) network, allowing for the incorporation of a cluster of remote points into the Building Automation Station over the MS/TP network.

The PPM family leverages the MS/TP network to extend the reach of any BTL-listed BACnet Building Controllers application program.

Each Universal Input can be configured for analog or digital input. Input/Output type is configured by writing to BACnet object properties.

Features

- Wide range of signal type support for flexible IO solutions.
- Device ID and Device name auto-populated for efficient start up (Device ID and Device name are also writable for customization).
- UL and cUL Listed as Enclosed Energy Management Equipment. No additional enclosure required.
- Evaluated and certified by UL as suitable for installation in plenum areas. (Building codes for plenum requirements vary by location; check with local building authority.)
- LEDs, visible through the housing, indicate the power, communication, and DO status.

- Default communication at 19200 baud also supports 9600, 38400 and 76800 via DIP switch.
- 8-bit DIP switch to configure MAC address.
- Recover and resume communication on the network after a power interruption without operator intervention.
- Capable of mounting on electrical junction box without field modification or adaptors. (4 in. x 4 in. standard depth US box, 100 mm x 100 mm x 25 mm Asia/Pacific standard box.)
- DIN rail and surface mount installation also possible.
- Assembly has a cover label associated with the LEDs for easy labeling and identification.
- Supports unsolicited COVs when faster data point value updates are required.

Hardware

Controller Board

The controller interfaces with, but does not provide, direct control of the following external devices:

- Digital input devices (dry contacts from motion sensors, alarm and door contacts) or Accumulator (gas, water, electrical)
- Digital output devices (fans, pumps, lighting)
- Analog input devices (temp, humidity, flow, pressure)
- Analog output (valves, actuators)

		PPM Type		
		Digital PPM	Analog PPM	Combo PPM
I/O function	Description	Maximum number of functions per module		
Digital inputs				
Binary Inputs	Status indication, voltage-free/dry contact	4	2	5
Counter	Count/accumulator, voltage-free/dry pulse contact	3		
Analog inputs w/ 12-bit A/D resolution				
	Temperature Ni 1000		4	4
	Temperature Pt 1000 385		4	4
	Temperature NTC 10K Type II	1		
	Voltage, DC 0 ... 10V		4	4
	Current DC 4... 20 mA		2	
Digital outputs				
BO OnOff	NO Contact, 240Vac, 5A Resistive/ 2 A General Purpose	2		3
Analog outputs				
	DC 0..10V		2	2

MS/TP Point Pickup Modules Specifications

Power Requirements Operating Range Power Consumption	Input power range of 19.2 Vac to 28.8 Vac (50 or 60 Hz) 4 VA to 7 VA
Universal Inputs	<p>6 Point Digital PPMs (PPM-1U32.BPR and PPM-1U32.BPF) 1- 10KΩ Type II NTC Thermistor or dry contact</p> <p>6 Point Analog PPMs (PPM-2U22.BPR and PPM-2U22.BPF) 2- 1000 Nickel RTD, 1000 Pt RTD, 0-10V, or dry contact</p> <p>12 Point Combination PPMs (PPM-2U3322.BPR and PPM-2U3322.BPF) 2- 1000 Nickel RTD, 1000 Pt RTD, 0-10V, or dry contact</p>
Digital Outputs	<p>6 Point Digital PPMs (PPM-1U32.BPF and PPM-1U32.BPR) 2- Form A NO (Normally Open) Relays. 24 to 240 Vac, 5A resistive, 2A General Purpose, 5(2)</p> <p>6 Point Digital PPM (PPM-1U32.BPR) 2- Hand-Off-Auto switches provide manual operation of the relays for commissioning</p> <p>12 Point Combination PPMs (PPM-2U3322.BPF and PPM-2U3322.BPR) 3- Form A NO (Normally Open) Relays. 24 to 240 Vac, 5A resistive, 2A General Purpose, 5(2)</p>

Analog Inputs	6 Point Analog PPMs (PPM-2U22.BPF and PPM-2U22.BPR) 2- 1000 Nickel RTD, 1000 Pt RTD, 0-10Vdc, or 4-20mA 12 Point Combination PPMs (PPM-2U3322.BPF and PPM-2U3322.BPR) 2- 1000 Nickel RTD, 1000 Pt RTD, 0-10Vdc
Analog Outputs	6 Point Analog PPM (PPM-2U22.BPF and PPM-2U22.BPR) 2- 0-10 Vdc 12 Point Combination PPM (PPM-2U3322.BPF and PPM-2U3322.BPR) 2- 0-10 Vdc
Digital Inputs	6 Point Digital PPMs (PPM-1U32.BPF and PPM-1U32.BPR) 3- Dry contact or Pulse accumulator
Dimensions	4.5 in x 4.5 x 1.4 in (114.3 mm x 114.4 mm x 34.5 mm)
Weight	0.8 lb max. including box
Communications Remote Local	BACnet MS/TP master or slave 9600 to 76800 baud set via DIP switch
Storage Temperature	-40°F to 158°F (-40°C to 70°C)
Operating Range	32°F to 122°F (0°C to 50°C) 5% to 93% RH (non-cond.)

Ordering Information

Part Number	Description
PPM-1U32.BPF	6 Point Digital BACnet MS/TP Point Pickup Module, Fixed terminal blocks (1UI 3DI 2DO)
PPM-1U32.BPR	6 Point Digital BACnet MS/TP Point Pickup Module, Removable terminal blocks and HOA switches (1UI 3DI 2DO)
PPM-2U22.BPF	6 Point Analog BACnet MS/TP Point Pickup Module, Fixed terminal blocks (2UI 2AI 2 AO)
PPM-2U22.BPR	6 Point Analog BACnet MS/TP Point Pickup Module, Removable terminal blocks (2UI 2AI 2 AO)
PPM-2U3322.BPF	12 Point Combination BACnet MS/TP Point Pickup Module, Fixed terminal blocks (2UI 3DI 3DO 2AO 2AI)
PPM-2U3322.BPR	12 Point Combination BACnet MS/TP Point Pickup Module, Removable terminal blocks (2UI 3DI 3DO 2AO 2AI)
PPM-DIN.RMB	BACnet MS/TP Point Pickup Module DIN rail mounting brackets(5 pair)
550-975P100	3-wire 120 ohm 1/2W carbon composition resistor/each end of line terminator (pkg. of 100)
550-974P10	3-wire RS-485 reference terminator for single earth ground termination at one end of network.

BACnet Protocol Implementation Conformance Statement (Abbreviated)

Date: 8 June 2010

Vendor Name: Siemens Building Technologies

Product Name: Siemens Point Pickup Module

Product Model Number: PPM-1U32.BPF, PPM-1U32.BPR, PPM-2U22.BPF, PPM-2U22.BPR, PPM-2U3322.BPF, PPM-2U3322.BPR

Applications Software Version: 3.0

Firmware Revision: 1.00

BACnet Protocol Revision: 135-2004

Product Description: BACnet MS/TP I/O expansion module.

BACnet Standardized Device Profile (Annex L): BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B, DS-RPM-B, DS-WP-B, DS-COVU-B, DM-DDB-B, DM-DOB-B, DM-DCC-B,

Segmentation Capability: (None)

Standard Object Types Supported:

PPM Type	Digital PPM	Analog PPM	Combination PPM
Objects types supported	AI, BO BI, Accumulator, Device	AI, AO BI, Device	AI, AO, BO, BI, Device
PPM Part Number	PPM-1U32.BPF PPM-1U32.BPR	PPM-2U22.BPF PPM-2U22.BPR	PPM-2U3322.BPF PPM-2U3322.BPR

See additional documentation for optional and proprietary properties.

Data Link Layer Options:

MS/TP slave (Clause 9), baud rate(s): 9600, 19200, 38400, 76800

MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800

Device Address Binding:

Is static device binding supported? No

Networking Options: (None)

Character Sets Supported:

ANSI X3.4

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