Carrier

TruVu

i-Vu® Building Automation System

TruVu™ MPC Processor

Part Number: TV-MPCXP

The Carrier® TruVu™ MPC Processor provides multi-purpose monitoring and control for a variety of HVAC system applications. Flexible and versatile, it supports multiple I/O configurations for accomplishing both common and custom HVAC control strategies.

i Vu

The TruVu MPC Processor features built-in routing and integration capabilities, along with support for up to nine TruVu MPC I/O expansion modules and a total of 180 input/output points.

Application Features

- Comprehensive library of factory-engineered control programs available for complete air-side and water-side system control
- Graphically programmable using the Snap programming tool
- Supports Carrier communicating room sensors, which allow for local setpoint adjustment and local overrides

Hardware Features

- Gig-E 1000 Mbps Ethernet port supports BACnet/IP, Modbus TCP/IP and DHCP addressing
- Local access 10/100 Ethernet port for system startup and troubleshooting
- Real-time clock keeps time in the event of power failure for up to 3 days without batteries
- Capable of system or stand-alone operation
- Can be din-rail or screw mounted
- Supports native BACnet MSTP and Modbus communications
- Supports up to 9 TruVu MPC I/O expanders (any combination of TV-MPCXPIO48, TV-MPCXPIO812 or TV-MPCXPIO012) and/or up to 6 legacy MPC Open XPIO expanders (max 9 total)

System Benefits

- Fully plug-and-play with the Carrier i-Vu building automation system
- Supports demand limiting and optimal start for maximum energy savings
- Supports up to 1,500 third-party BACnet points and up to 200 Modbus points for system integration
- Supports BACnet Foreign Device Registration (FDR)

BACnet Features

- BACnet Testing Laboratories (BTL) certified
- Conforms to the BACnet Building Controller (B-BC), BACnet Router (B-RTR), and BACnet BBMD (B-BBMD), standard device profiles
- Supports BACnet interoperability and routing with and between BACnet/IP and BACnet MS/TP
- Can serve as a BACnet Broadcast Management Device (BBMD)
- Supports BACnet Foreign Device Registration (FDR)

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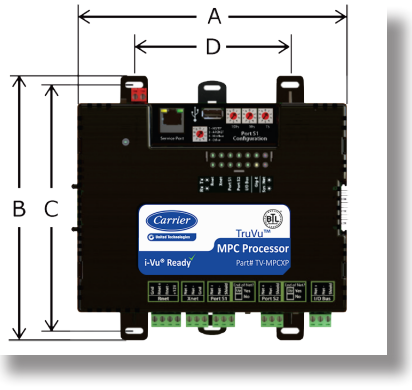
Specifications

BACnet Support	Conforms to the BACnet Building Controller (B-BC), BACnet Router (B-RTR), and BACnet BBMD (B-BBMD) device profiles as defined in BACnet 135-2012 Annex L, Protocol Revision 14
Communication Ports	**Gig-E:** 10/100/1000 BaseT Ethernet port for BACnet/IP and/or BACnet/Ethernet and/or Modbus TCP/IP communication **S1 MSTP:** High-speed EIA-485 port with End of Net switch for connecting one of the following: • BACnet MS/TP network at 9.6, 19.2, 38.4, 57.6, 76.8, or 115.2 kbps • Modbus RTU at 9.6, 19.2, 38.4, 57.6, 76.8 or 115.2 kbps **S2 MSTP:** Electrically isolated EIA-485 port with End of Net switch for connecting one of the following • BACnet MS/TP network at 9.6, 19.2, 38.4, 57.6, , 76.8, or 115.2 kbps • Modbus RTU at 9.6, 19.2, 38.4, 57.6, 76.8 or 115.2 kbps **Service:** 10/100 Base T Ethernet port for system start-up and troubleshooting; IO Bus port: Provides communication for wired TruVu MPC I/O expanders that are powered by external power supplies; **IO Bus edge connector:** 6-pin connector that provides communication and power to a directly-connected TruVu MPC I/O expander
Third Party Integration	Supports up to 1,500 third-party BACnet points and 200 Modbus points (memory dependent).
Physical	Fire-retardant plastic ABS, UL94-5VA
I/O Expanders	Supports up to 9 TruVu MPC I/O expanders and/or 6 MPC Open XPIO expanders (max 9 total)
Protection	Two fast acting, 5mm x 20mm glass fuses: • A 2A fuse for the TV-MPCXP's power • A 4A fuse for the I/O bus edge connector. The power and network ports comply with the EMC requirements EN50491-5-2.
Compliance	**United States**: FCC compliant to Title CFR47, Part 15, Subpart B, Class A; UL Listed, File E143900; CCN PAZX, UL 916, Energy Management Equipment; **ANZ**: RCM Mark AS/NZS 61000-6-3; **Canada**: UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant ICES-003, Class A; **CE Mark** Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; **UKCA Mark** compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
Environmental Operating Range	**Operating:** -40 to 158ºF (-40 to 70ºC) 10 to 95% RH, non-condensing
Power Requirements	24VAC ± 10%, 50-60Hz; 50 VA power consumption; 26VDC ± 10% 15W; Single Class 2 source only, 100 VA or less
Dimensions	**Overall** **A:** 7.1 in. (18.03 cm) **B:** 6.95 in. (17.65 cm) **Mounting** **C:** 6.45 in. (16.38 cm) **D:** 4.1 in. (10.4 cm) **Depth:** 2.09 in. (5.31 cm) **Weight:** 1 lb (0.45 kg)



For more information, contact your local Carrier Controls Expert.

Controls Expert Locator:
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