

### i-Vu<sup>®</sup> Building Automation System TruVu<sup>™</sup> MPC I/O Expanders

Part Numbers: TV-MPCXPIO48, TV-MPCXPIO812, TV-MPCXPI0012

The Carrier<sup>®</sup> TruVu<sup>™</sup> MPC I/O expanders provide I/O point capacity for the TruVu MPC Processor. Flexible and versatile, the TruVu MP Processor supports multiple I/O configurations for accomplishing both common and custom HVAC control strategies.

#### **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

#### **Hardware Features**

- Adds up to 180 I/O points to the TruVu MPC Processor
- Removable screw terminals for I/O connections
- Supports din-rail or screw tab mounting
- Hand-Auto-Off switches on all output channels
- Software selectable configuration no jumpers
- Expanders can be mounted to MPC processor in a compact configuration or remotely mounted up to 1000 feet away

#### **System Benefits**

- Fully plug-and-play with the Carrier i-Vu<sup>®</sup> building automation system
- Supports demand limiting and optimal start for maximum energy savings
- Compatible with i-Vu Tenant Billing for tracking tenants' after-hours energy usage











TV-MPCXPIO48 4 outputs & 8 inputs 12 points total



TV-MPCXPI0812 outputs & 12 inputs 20 points total



TV-MPCXPI0012 12 inputs 12 points total



Cooling Towers

AHUs

Chillers

## i-Vu<sup>®</sup> Building Automation System **TruVu<sup>™</sup> MPC I/O Expanders**



# Part Numbers: TV-MPCXPI048, TV-MPCXPI0812, TV-MPCXPI0012

#### **Specifications**

Communication Ports	<b>IO Bus port:</b> Provides communication for wired TruVu MPC I/O expanders that are powered by external power supplies. <b>IO Bus edge connector:</b> 6-pin connector that provides communication and power to a directly-connected TruVu MPC I/O expander
Inputs	TV-MPCXPIO48: 8 inputs
	TV-MPCXPI0812: 12 inputs
	TV-MPCXPI0012: 12 inputs
	-Inputs software configurable for 0-5 VDC, 0-10 VDC, 0-20 mA, thermistor (5k, 10k Type II), 1k RTD
	(Platinum,Nickel, or Balco), and Dry Contact.
	-Inputs are 16 bit A/D and support up to 60 pulses per second (8.33 msec per pulse).
Outputs	TV-MPCXPIO48: 4 outputs
	TV-MPCXPI0812: 8 outputs
	- Outputs can be set as analog or binary outputs.
	- Analog outputs can be used for 0-10 VDC, 0-20 mA (12 bit A/D).
	- Binary outputs have a built-in relay and can be used to switch external devices or relays up to 1A, 30Vac/
	Vdc.
	- HAO (hand/auto/off) switches are on each output, including potentiometers for manual adjustment of
	analog outputs.
Protection	Two fast acting, 5mm x 20mm glass fuses:
	-A 2A fuse for the TV-MPCXPIO expander'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.
Status Indicators	LED status of communications, power, running, errors, and outputs
Compliance	<ul> <li>United States of America: FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL listed to UL916, PAZX, Energy Management Equipment; Canada: Industry Canada Compliant, ICES-003, Class A; cUL listed UL 916, PAZX and Energy Management Equipment</li> <li>Europe: EN50491-5-2:2009; Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light industry environment EN50491-3:2009, Part 3: Electrical safety requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) Low Voltage Directive: 2014/35/EU RoHS Compliant: 2011/65/EU</li> <li>Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3</li> </ul>
Environmental	<b>Operating:</b> -40 to 158°F (-40 to 70°C) 10 to 95% RH, non-condensing
Operating Range	
Power Requirements	24VAC ± 10%, 50-60Hz 50 VA power consumption 26VDC ± 10% 12W
Dimensions	Overall       A: 6.9 in. (17.53 cm)         B: 6.95 in. (17.65 cm)       B         Mounting       C: 6.45 in. (16.38 cm)         D: 4.1 in. (10.4 cm)       B
	Depth: 2.09 in. (5.31 cm)       Image: second

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