

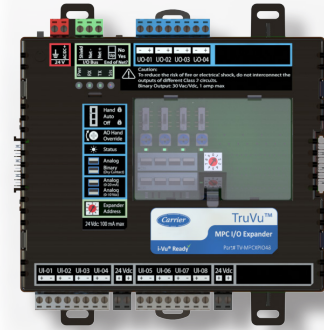


# i-Vu® Building Automation System

## TruVu™ MPC I/O Expanders

Part Numbers: TV-MPCXPIO48, TV-MPCXPIO812, TV-MPCXPIO012

TruVu



The Carrier® TruVu™ MPC I/O expanders provide I/O point capacity for the TruVu MPC Processor and TV-MPCXP1628. Flexible and versatile, the TruVu MPCXP controllers support 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

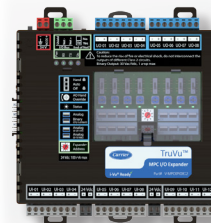
- Adds up to 180 I/O points to the TruVu MPC Processor and TV-MPCXP1628
- Removable screw terminals for I/O connections
- Supports din-rail or screw tab mounting
- Hand-Auto-Off switches on all output channels
- Software selectable configuration - no jumpers
- Expanders can be mounted to MPC processor in a compact configuration or remotely mounted up to 1000 feet away

### System Benefits

- Fully plug-and-play with the Carrier i-Vu® 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



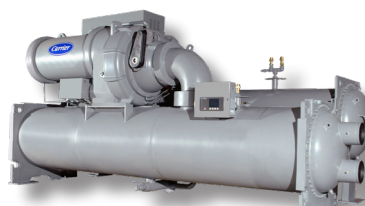
**TV-MPCXPIO812**  
8 outputs & 12 inputs  
20 points total



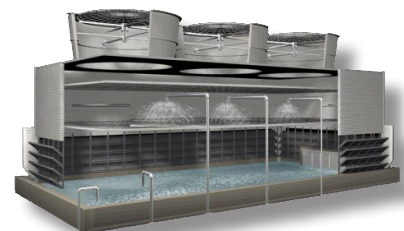
**TV-MPCXPIO012**  
12 inputs  
12 points total



AHUs



Chillers



Cooling Towers

# i-Vu® Building Automation System

## TruVu™ MPC I/O Expanders

Part Numbers: TV-MPCXPIO48, TV-MPCXPIO812,  
TV-MPCXPIO012



### Specifications

<b>Communication Ports</b>	<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
<b>Inputs</b>	<b>TV-MPCXPIO48:</b> 8 inputs <b>TV-MPCXPIO812:</b> 12 inputs <b>TV-MPCXPIO012:</b> 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).
<b>Outputs</b>	<b>TV-MPCXPIO48:</b> 4 outputs <b>TV-MPCXPIO812:</b> 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.
<b>Protection</b>	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.
<b>Status Indicators</b>	LED status of communications, power, running, errors, and outputs
<b>Compliance</b>	<b>United States:</b> FCC compliant to Title CFR47, Part 15, Subpart B, Class A; UL Listed, File E143900; CCN PAZX, UL 916, Energy Management Equipment; <b>ANZ:</b> RCM Mark AS/NZS 61000-6-3; <b>Canada:</b> UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant ICES-003, Class A; <b>CE Mark</b> Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; <b>UKCA Mark</b> compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
<b>Environmental Operating Range</b>	<b>Operating:</b> -40 to 158°F (-40 to 70°C) 10 to 95% RH, non-condensing
<b>Power Requirements</b>	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)

#### Mounting

**C:** 6.45 in. (16.38 cm)

**D:** 4.1 in. (10.4 cm)

**Depth:** 2.09 in. (5.31 cm)

**Weight:** 1.1 lbs (0.49 kg)

