



## **CMMB-IP** IP I/O Module

### Adding Flexibility to your Building Automation System

The CMMB-IP is a cost-effective I/O expansion module with BACnet, Modbus and IP communication for easy integration of non-intelligent inputs and outputs.

Combining the 20 inputs and outputs of the CMMB-IP with your Building Automation System provides a straightforward extension of multiple existing controllers and reduces the unnecessary cost of additional components.

Using an embedded web server, the network settings of the I/O module can easily be configured from a remote location. When a more versatile expansion controller is required, the optional LCD display and integrated router make the CMMB-IP the best technological choice for a wide range of applications.

**The I/O module will help you improve reliability, increase productivity and reduce your costs.**

#### MODELS

Model	Router	Display	Communication Ports	
			BACnet Ports	Modbus Ports
CMMB-IP	-	-	1	1
CMMB-IP-L	-	Yes	1	1
CMMB-IP-R1B	Yes	-	1	-
CMMB-IP-R2B	Yes	-	2	-
CMMB-IP-RL1B	Yes	Yes	1	-
CMMB-IP-RL2B	Yes	Yes	2	-

Connect up to 64 BACnet MS/TP devices to an IP network using the CMMB-IP's built-in routing functionality. Available with either one or two MS/TP ports.

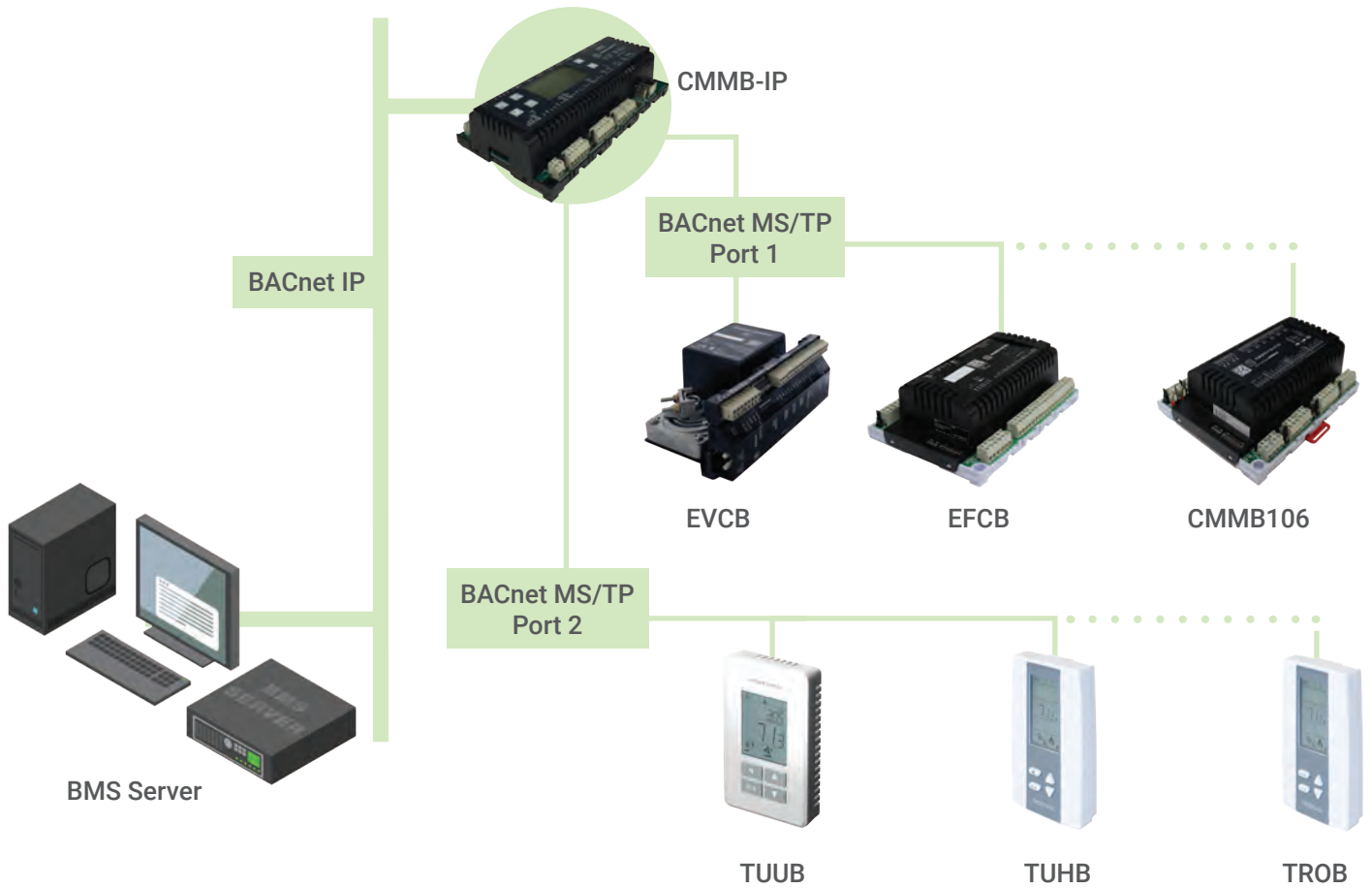
#### APPLICATIONS

The CMMB-IP is an ideal choice for a variety of applications in the HVAC industry, including use as a:

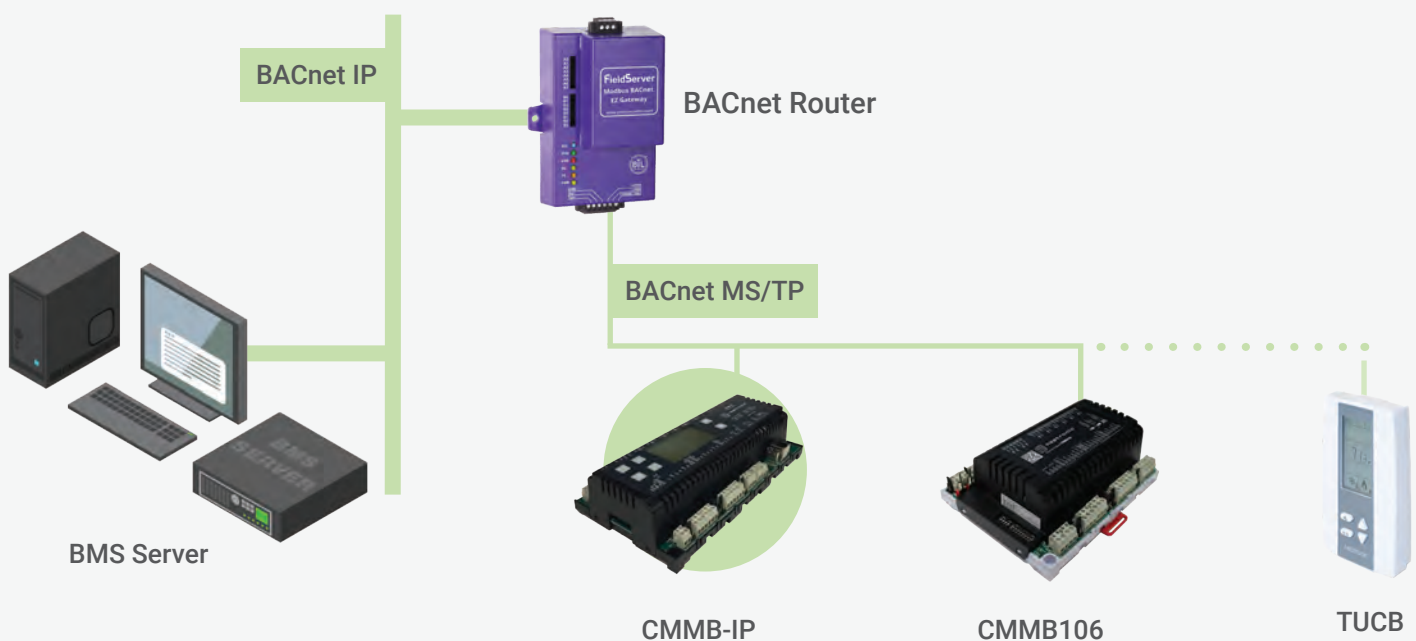
- BACnet/IP Router With 2 MS/TP Ports
- BACnet MS/TP Device
- Modbus TCP/IP Device
- Modbus RTU Device

# APPLICATION EXAMPLES

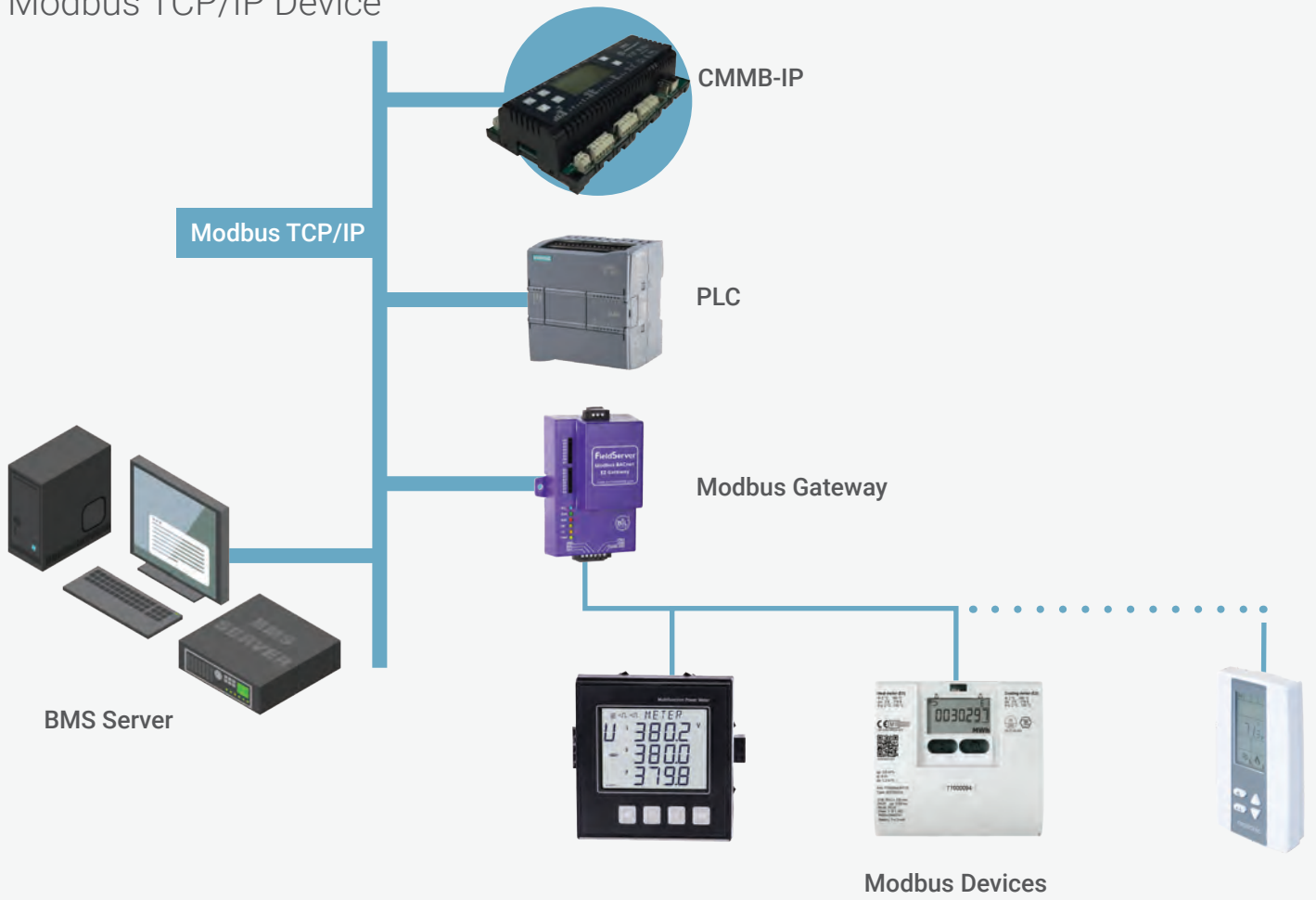
## BACnet/IP Router with 2 MS/TP Ports



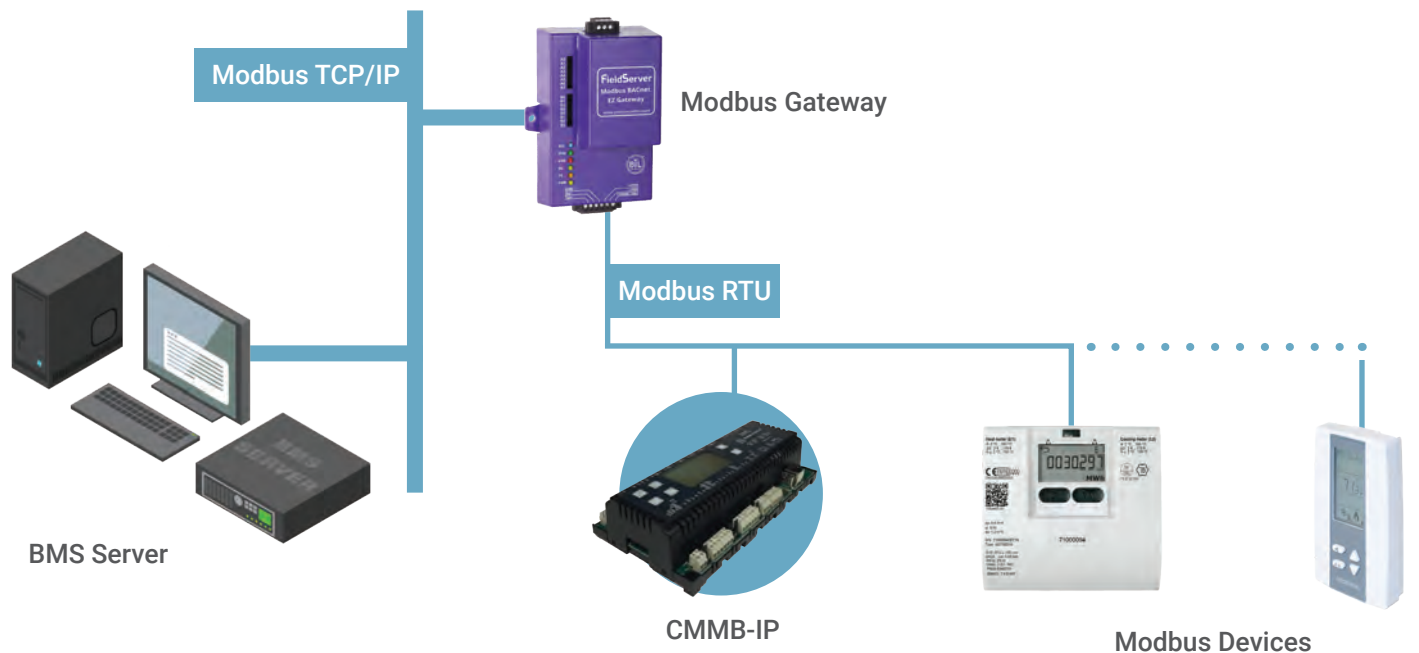
## BACnet MS/TP Device



## Modbus TCP/IP Device



## Modbus RTU Device



## FEATURES

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### Power & Communication

- 24Vac or 24Vdc supply
- Up to 2 RS-485 communication ports for BACnet MS/TP or Modbus RTU
- BACnet IP/Ethernet or Modbus TCP/IP
- Set network settings via embedded WEB server
- Provision for I/O expansion modules
- Router functionality (optional)

### 10 Inputs

- 2 binary inputs
- 8 universal inputs

### 10 Outputs

- 6 binary outputs
- 4 analog outputs
- Supervised manual override of outputs (MOA) via local web page or local dip switches

### Other

- SD card slot for updates
- USB port for 5 Vdc power supply
- RJ45 Ethernet connection for IP and WEB services

## LOCAL WEB PAGE

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The CMMB-IP offers an integrated web page that allows remote control over the I/O module's network settings. Users can easily perform the following actions:

- Override outputs
- Configure function parameters
- Configure network settings

## NETWORK COMMUNICATION

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### BACnet MS/TP

- MS/TP @ 9600, 19200, 38400 or 76800 bps
- Automatic baud rate detection
- Automatic device instance configuration

### BACnet IP/Ethernet

- All IP / Ethernet configuration via on board WEB page
- Display device status including each available data point, in addition to the BACnet object interface.
- Supports DHCP or fixed/static addressing

### Modbus

- Modbus @ 9600, 19200, 38400 or 57600 bps
- RTU Slave, 8 bits (configurable parity and stop bits)
- Connects to any Modbus master

### Modbus TCP/IP

- Connects to any Modbus TCP/IP master controller

