

TECHNICAL DATA SHEET

DS0132 rev 37

Cylon® FBXi Series



DESCRIPTION

The **FBXi Series** is a range of freely programmable BACnet® Controllers with native BACnet/IP communications support. BTL listed (B-BC) with built in advanced cybersecurity technology and multi-protocol support, the **FBXi** series is ideally suited as integration platform for HVAC equipment and electrical systems including lighting control and metering applications.

With support for up to sixteen **FLX (Field Level eXpansion)** series extension modules equipped with UniPut technology and dedicated **FusionAir** Sensor port, the **FBXi** series provides power and flexibility for complex plant applications. Local override function through **HOA** switches is available on the **-H** variants.

For medium sized plants, the **-8R8** variants feature built-in 8 UniPuts™ with Relay and 8 Universal Inputs

APPLICATION

The **FBXi** Series supports routing of BACnet MS/TP to BACnet/IP or communicates on Modbus TCP and Modbus RTU as clients.

It is designed for a wide range of energy management applications for intelligent control of:

- HVAC equipment such as Central Plant, Boilers, Chillers, Cooling Towers, Pump Systems, Air Handling Units (Constant Volume, Variable Air Volume and Multi-zone), and Rooftop Units,
- Electrical systems such as lighting control, variable frequency drives and metering.

The controller accommodates available pre-engineered strategies or can be tailored to custom applications using **CXproHD** programming software.

FLX I/O Expansion Module

(-H variants include Hand/Off/Auto Local Override Function)

FLX-4R4(-H) 4 UniPuts with Relay, 4 Universal Inputs

FLX-8R8(-H) 8 UniPuts with Relay, 8 Universal Inputs

FLX-16DI 16 Digital Inputs

FLX-PS24 Power Supply Module

FLX-RMC Remote Module Connector

Connectivity for Complex Plants

BACnet/IP communications

with dual port Ethernet switch (star or daisy chain topology) and support for both DHCP and Static IP

Network Time Protocol (NTP) support

Multi-protocol communications support

for BACnet MS/TP, Modbus TCP, Modbus RTU, HTTPS for configuration

FusionAir Sensor Port

Enables IAQ applications using CO₂ and VOC sensors in FusionAir

Touch Free user mobile app

Dual IP ports

Failsafe switchover of IP communications in event of power interruption

Control Capability for Complex Plants

Flexible onboard UniPut technology

allows expandable I/O configurations from 16 to 96 points through connected FLX modules

UniPut™

ABB's patented technology that can be configured as analog / digital outputs or analog inputs automatically by the downloaded strategy

FLX -H

Local HOA switches provides easy manual override capability for simple checkout and override

LED status on all I/O channels

provides indication of fault or override status

Compact form factor for Medium Complexity

-8R8 and 8R8-H versions with built in FLX control points for medium complexity plant applications