

OpenBAS BUILDING AUTOMATION SYSTEM

Description

Mircom's OpenBAS-NWK-ETH3 Ethernet Gateway is a network adaptor card with simultaneous multiple protocol support in both Ethernet and field bus.

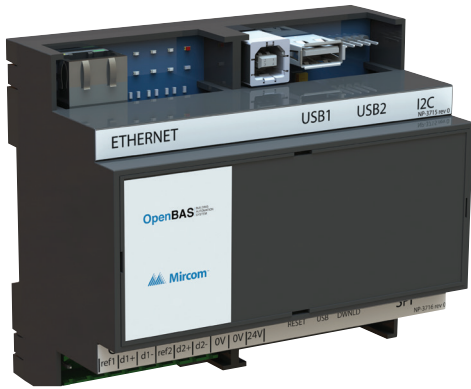
Mircom's OpenBAS-NWK-ETH3 can connect to a single NX10 series controller to provide webserver and IP protocol capability. The ETH3 can also be connected to the OpenBAS Learning Module for training purposes. The ETH3 has 2 field bus connections that are factory set to RS-485. One of the COMM ports can be converted to RS-232 with an add-on accessory. The ETH3 also has a real time clock and calendar to allow for functions such as programming logic control and scheduling.

Features

- Modular design to cover any small, medium, or large project.
- Standard field bus protocols to integrate into any existing BAS system such as: BACnet, Modbus, Optomux, N2-Open, ECM, and ASCII.
- There are USB 2.0, SPI, and I2C buses for various applications.
- Advanced networking to integrate into IP networks and use the most advanced features and protocols such as distributed computing, USB and Cloud Storage, HTML5, JavaScript, XML, Ajax, SMS, and GSM.
- Ethernet high speed 10/100 provides responsiveness and incorporates a TCP/IP stack that includes the aforementioned protocols, as well as: Web Page Server, BACnet/IP, Modbus/TCP, FTP, SNMP, and SMTP (e-mail generation).
- PLC ladder processor.
- Powerful Configuration Software supports ladder templates and script programs for an effortless solution.
- Single solution provider – seamlessly integrates into Mircom's enclosures, boxes, and power supplies to provide the installer with a single supplier source.
- Enables remote programming of the slave controllers.
- DIN Rail mountable.
- Includes RTCC battery backup
- (only for OpenBAS-NWK-ETH3 model).

Typical Applications:

- Building Automation Controller
- HVAC applications
- Lighting applications
- Energy monitoring
- IP to field bus gateway



Features

- Footprint: 7 x 9 x 6 cm.
- DIN Rail mountable.
- 10/100 Mbps Ethernet.
- Web page servers.
- E-mail generator for alarm reporting.
- Powered by 24 VAC/VDC or 12 VDC.
- USB 2.0, SPI, and I2C field buses.
- IP multiple protocols: BACnet/IP, Modbus/TCP HTTP, SMTP, FTP, SNM, and Ajax.

Description

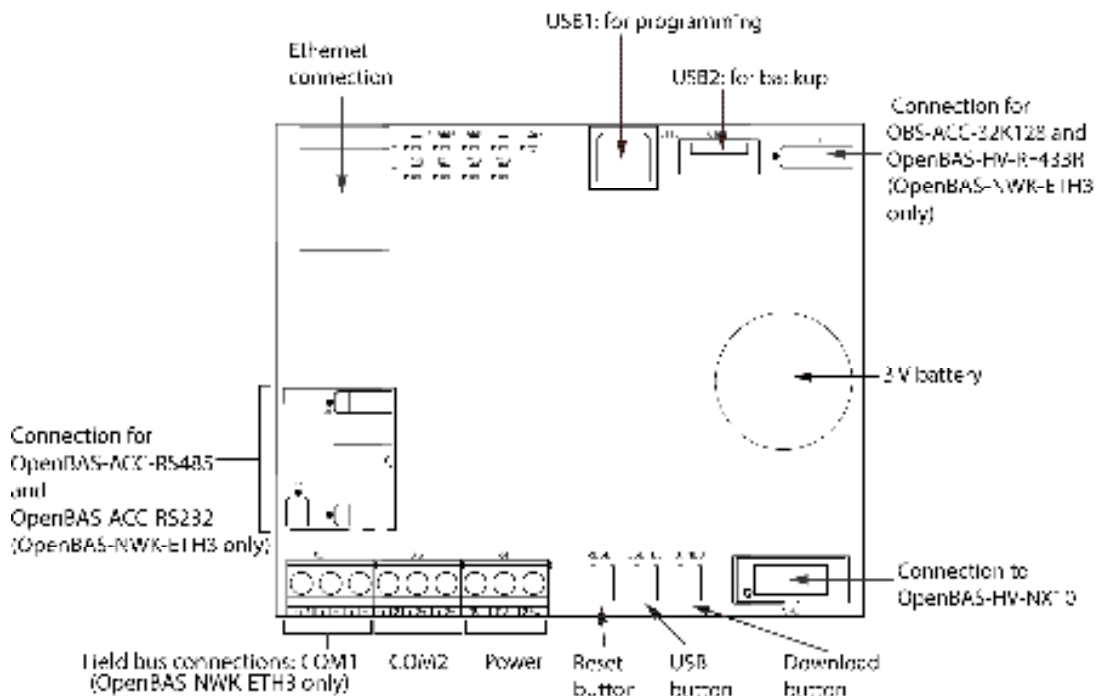
Mircom's OpenBAS-NWK-ETHXP is also offered for smaller applications, which involves fewer devices. The ETHXP has virtually the same features as the ETH3, excluding COM1 and COM2 ports, I2C bus, and a real-time clock.

The ETHXP supports BACnet IP, Modbus TCP/IP, and can be connected to both the NX10 Series of Controllers and the OpenBAS Learning Module (OPENBAS-HV-LEARN).

Typical Applications:

- Building automation controllers
- HVAC applications
- Lighting applications
- Energy monitoring

Wiring Diagram



Technical Information

Standards	UL/CSA-C22.2 No. 61010-1 3rd Ed. UL/CSA-C22.2 No. 61010-2-201 1st Ed. FCC Part 15 / ICES-003, Class "A"
Input:	12-24 Vac 50/60Hz, or 12-24 Vdc, 250mA max.
Output:	The +12 terminal supplies 12 Vdc, 2 mA max. (when 24V powered) only to feed universal or digital inputs. No external loads are allowed
Power Supply Protection:	Resettable fuse 1.1 A
Battery:	Type: CR2032 3 V - 3.3 V, maximum abnormal charging current: 10 mA Mircom part number: BT-007
Wiring Requirements:	Twisted pair copper wire, 12-24AWG, stripped to 7-8mm and torqued to 0.5 Nm max.
Communication Ports:	1 Ethernet port supporting the following protocols: <ul style="list-style-type: none"> • BACnet/IP • Modbus/TCP • HTTP • SMTP • FTP • JavaScript • Ajax 2 RS-485 ports supporting the following protocols (OpenBAS-NWKETH3 only) <ul style="list-style-type: none"> • BACnet/MSTP • Modbus/RTU-Master • N2/O22-master • ASCII BAUD Rate: 2400, 4800, 9600, 19200, 38400, 76800 COM1 can be changed to RS-232 or optically isolated RS-485 2 USB 2.0 ports for programming and backup 1 I2C port for memory expansion and OpenBAS-HV-RF433R (OpenBASNWK-ETH3 only) 1 SPI port
Physical Characteristics:	Weight: 140 g (4.9 oz) Enclosure dimensions: 106 mm x 90 mm x 58 mm (4 3/16" x 3 35/64" x 2 17/64")
Ambient Conditions:	Operating Temperature: 0° to 40°C (32° to 104°F) Maximum Relative Humidity: 80 percent for temperatures up to 31°C decreasing linearly to 50 percent relative humidity at 40°C Indoor Use Only
Mounting:	Mount in a National Recognized Test Laboratory certified enclosure
Cleaning:	This product does not require cleaning and should not be cleaned

Ordering Information

Model	Description
OPENBAS-NWK-ETH3	Ethernet Gateway
OPENBAS-NWK-ETHXP	Ethernet and Field Bus Multiple Protocol Network Expansion
BT-007	Replacement battery for ETH3, ME11

NOT TO BE USED FOR INSTALLATION PURPOSES.



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