ECLYPSE Communication Modules

Overview

Communication modules enable ECLYPSE Connected Controllers to communicate with a variety of devices.

The ECY-RS485 communication module adds two extra RS-485 trunks to support more BACnet MS/TP and Modbus RTU devices.

An ECY-MBUS communication module adds one M-Bus port to support and power up to 60 M-Bus meters.

Features & Benefits

- Multiple communication protocols, like BACnet/IP and Modbus, make it easier to integrate into existing building automation systems and add functionality for edge applications such as metering.

- Easier communication module setup through the same web interface as the ECLYPSE connected controllers.

- The communications modules are plug & play devices and are equipped with HD-15 connectors that transmits power and communications to the next module for fast and easy assembly.

- The status LEDs on the communications modules allows the user to confirm the status of the inputs/outputs and facilitate commissioning and troubleshooting.

- Supports Distech Controls' EC-*gfx*Program, which makes Building Automation System (BAS) programming effortless, by allowing you to visually assemble building blocks to create a custom control sequence for any HVAC, lighting, or building automation application.

Model Selection

Model	Description
ECY-RS485	ECLYPSE Communication module with two RS-485 ports for Modbus RTU or BACnet MS/TP with an ECLYPSE connected controller.
ECY-MBUS	ECLYPSE Communication module with one M-Bus port, supporting up to 60 M-Bus meters when connected to an ECLYPSE connected controller, or up to 3 meters when connected via USB to an ECY-VAV, ECY-303, or ECY-(P)TU.

Product Specification ECY-RS485

Supported Quantity	1 × ECY-RS485 per ECY connected controller

Power Supply Input

Voltage	18VDC; Class 2
Power Consumption	1.5 W

Communications

BACnet MS/TP or Modbus RTU	2 × RS-485 serial communication ports
	Each RS-485 port supports one communication protocol at a time
RS-485 Wiring	1-pair + Common/shield
Connection Type	Screw terminals
RS-485 EOL Resistor	Built-in
RS-485 Baud Rates	9600, 19 200, 38 400, or 76 800 bps
RS-485 Addressing	Controller's Web Configuration Interface
Status Indicators	Green LED: TX Orange LED: RX

Mechanical

Dimensions (H × W × D)	4.74 × 3.20 × 2.31" (120.31 × 81.17 × 58.56mm)
Shipping weight	0.69lbs (0.31 kg)
Mounting	DIN rail or screw mounting
Enclosure Material	FR/ABS
Enclosure Rating[1]	Plastic housing, UL94-V0 flammability rating

1. All materials and manufacturing processes comply with the RoHS directive and are marked according to the Waste Electrical and Electronic Equipment (WEEE) directive

Environmental

Operating Temperature	32 to 122°F (0 to 50°C)
Storage Temperature	-22 to 158°F (-30 to 70°C)
Relative Humidity	0 to 90% non-condensing
Ingress Protection Rating	IP20 in accordance with IEC 60537
Nema Rating	1

Standards and Regulations

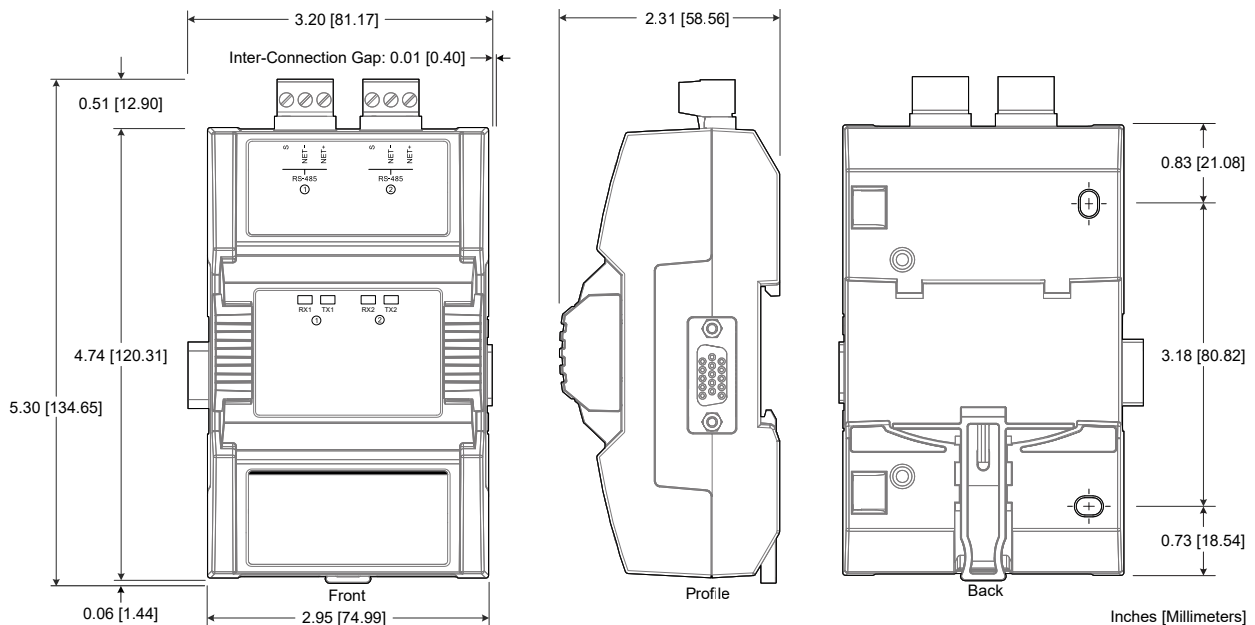|	
CE Emission	EN61000-6-3: 2007; A1:2011
CE Immunity	EN61000-6-1: 2007
FCC	Compliance with FCC rules part 15, subpart B, class B
UL Listed (CDN & US)	UL916 Energy management equipment

Figure 1: ECY-RS485 Dimensions

Product Specification ECY-MBUS

Supported Quantity	1 × ECY-MBUS per ECY-VAV, ECY-303 or ECY-TU/PTU

Power Supply Input

Power Source	ECY-PS24 or ECY-PS-100-240 power supply module, or USB port
Voltage	18V; Class 2 (when equipped) 5V; Class 2 (when connected via USB)
Power Consumption	10W over 18V power supply 2.5W over USB

Communications

M-Bus Ports	1x M-Bus serial communication port
Supported M-Bus Meters	3 (USB), or 60 (ECY-MBUS60)
M-Bus Wiring Terminals	2
M-Bus baud rates	300, 600, 900, 1200, 2400, 4800, and 9600
M-Bus Meter Addressing	Configured in EC-*gfx*Program
Status Indicators	Green LED: TX Orange LED: RX Green LED: POWER Red LED: MBUS Fault

Mechanical

Dimensions (H × W × D)	4.74 × 3.20 × 2.31" (120.31 × 81.17 × 58.56mm)
Shipping weight	0.69lbs (0.31 kg)
Mounting	DIN rail or screw mounting
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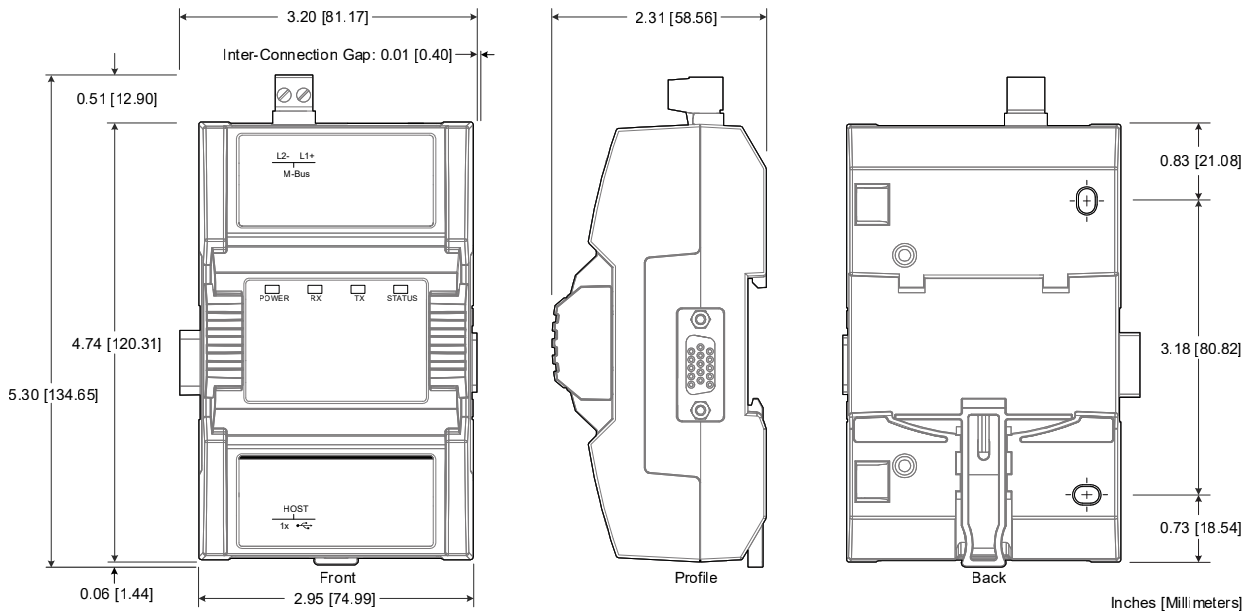|	
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Figure 2: ECY-MBUS Dimensions