

# EDGE EVO® EHR40-L Controller/Reader and Module

Interface to a Standard Door Lock



## SINGLE DOOR NETWORKED DOOR CONTROLLER / CONTACTLESS ICLASS® READER AND INTERFACE MODULE

- **Open Architecture** - Development platform enables use of hardware with any OPIN compliant access control software from a wide variety of partners.
- **Integrated Reader** - Integrated controller/reader provides 13.56 MHz iCLASS smart card compatibility and controller logic in one device.
- **Power Over Ethernet (PoE)** - Reduces wiring costs by powering the controller/reader and module/door components using one CAT-5 wire.
- **Single CAT5 and Strike Connection Location** - Controller/reader and module wiring terminate within single-gang box, allowing for easy wiring of IP to reader and strike to reader.

### Cable Specifications

#### Ethernet:

- 300ft (100m), CAT-5
- ALPHA 9504C, ALPHA 9405F

#### Output Circuits:

- 500ft (150m), 2-conductor shielded
- 22AWG ALPHA 1172C
- 18AWG ALPHA 1897C

#### Hi-O CANbus:

- 100ft (30m) total bus length
- 30ft (10m) length between drops
- 22AWG, 0.65mm, 0.33mm<sup>2</sup>

HID Global's Networked Access Solutions provide an open architecture development platform that enables HID's software partners to deploy a wide variety of versatile access control systems that protect their customers' hardware investments.

As part of HID Global's Networked Access Solutions family, the EDGE EVO® EHR40-L Controller/Reader and Interface Module is a single-door access control panel with a combined reader and a separate single-output lock interface that enables cost effective installation and simple door control.

The solution is designed to lower security doors as it does not monitor door position or requests to exit. The controller/reader is installed at the door, and the included

Hi-O interface module (ELM) is mounted within a US-style single-gang box (the Hi-O module can be located elsewhere, such as within a hollow door frame). The controller/reader and module are connected using the secure Hi-O bus and an additional Hi-O iCLASS® reader can be attached to the EHR40-L controller/reader's Hi-O bus for in/out reading. The EHR40-L also offers interface to 13.56 MHz compliant credentials, including iCLASS.

EDGE EVO solutions provide access to a complete ecosystem of partner solutions to enable customizable products that leverage the unique power of individual software provider offerings. Solutions are created for both onsite system administration as well as service oriented offsite solutions, depending on the OEM software provider's total solution.

**Features:**

- Provides a complete and fully functional hardware/firmware infrastructure for IP access control software host systems.
- Supports Power Over Ethernet (PoE), enabling cost-effective installation utilizing existing network infrastructure.
- Stores a complete access control and configuration database for one door with one or two readers and 125,000 cardholders.

- Integrated reader processes 13.56 MHz iCLASS credentials, ISO14443A CSNs.
- Provides access control processing, host interface and power for a single door, including one or two readers and one lock.
- Utilize module jumpers to select 12 or 24 VDC power to lock output when powering device over PoE or 24VDC.
- Provides encrypted door bus using Hi-O technology so that controller and Hi-O enabled readers and door components

- communicate securely.
- Connects to the host and other devices on a TCP/IP network.
- Receives and processes real-time commands from the host software application, while reporting all activity to host. Buffers up to 99,999 transactions.
- Hook directly up to a Hi-O iCLASS reader to support 2 reader in/out reading.



**SPECIFICATIONS**

<b>Model (and Part #)</b>	EHR40-L (82120CKL0001A)
<b>Mounting Holes - EHR40</b>	US Single-gang and EU / APAC 60mm
<b>Mounting Location - ELM</b>	Fits within US Single-gang or in hollow door frame
<b>Dimensions - EHR40</b>	3.3" W x 4.8" H x 1.2" D (83.9 mm x 122.2 mm x 30.5 mm)
<b>Dimensions - ELM</b>	1.3" W x 2.9" H x 0.7" D (31.7 mm x 72.9 mm x 18.3 mm)
<b>Weight - EHR40</b>	6.3oz (180g)
<b>Weight - ELM</b>	1.4oz (40g)
<b>Housing Material</b>	UL94 polycarbonate
<b>Audio / Visual Indicators</b>	Two LEDs on RJ-45 port for network; beeper for boot and tamper
<b>Operating Temperature</b>	32° to 122° F (0° to 50° C)
<b>Operating Humidity</b>	5% to 95% relative, non-condensing
<b>Storage Temperature</b>	-67° to 185° F (-55° to 85° C)
<b>Communication Ports</b>	Ethernet (10/100), Hi-O CANbus
<b>13.56 MHz Card Compatibility</b>	13.56 MHz iCLASS HID Application, ISO14443A CSN
<b>Certifications</b>	UL294 (US) Listed Component, CSA 205 (Canada), FCC Class B (US), CE: EN 300 330, EN 301 489-3, EN 50130-4 (EU), C-Tick: AS/NZS 4268 (Australia, New Zealand), IC: ICES-003 Class B (Canada), CE (EU), SRRC (China), KCC (Korea), NCC (Taiwan), iDA (Singapore), RoHS
<b>Warranty</b>	Warrantied against defects in materials and workmanship for 18 months (See complete warranty policy for details).

Input Power	
<b>DC Input (MAX) @ PoE</b>	14.4W (300mA @ 48VDC)
<b>DC Input (MAX) @ AUX +12VDC</b>	18W (1500mA @ 12VDC)
<b>DC Input (MAX) @ AUX +24VDC</b>	36W (1500mA @ 24VDC)
<b>Supervised Inputs Power (MAX)</b>	0.025W (5mA sink, 5V nominal) 0 to +5VCD Ref

Output Power (MAX) for total system (all field devices)	
<b>DC Input @ PoE</b>	9.6W
<b>DC Input @ AUX +12VDC</b>	14.4W
<b>DC Input @ AUX +24VDC</b>	28.8W
<b>Hi-O CANbus Output Voltage, DC Input = PoE</b>	24VDC
<b>Hi-O CANbus Output Voltage, DC Input = AUX</b>	AUX +VDC

Output Power (MAX) for individual field devices, DC Input = PoE	
<b>Hi-O Device on CANbus</b>	8W (333mA @ 24VDC)
<b>Wet Output (@12VDC)</b>	6.9W (580mA @ 12VDC)
<b>Wet Output (@24VDC)</b>	8.6W (360mA @ 24VDC)

Output Power (MAX) for individual field devices, DC Input = 12VDC	
<b>Hi-O Device on CANbus</b>	13.1W (1092mA @ 12VDC)
<b>Wet Output (@12VDC)</b>	8.4W (700mA @ 12VDC)

Output Power (MAX) for individual field devices, DC Input = 24VDC	
<b>Hi-O Device on CANbus</b>	26.6W (1108mA @ 24VDC)
<b>Wet Output (@12VDC)</b>	8.4W (700mA @ 12VDC)
<b>Wet Output (@24VDC)</b>	16.8W (700mA @ 24VDC)

Relay Rating	
<b>Relay Contact Rating (Dry Output)</b>	2A @ 30VDC

NOTES: Combined power of all field devices cannot exceed "Output Power (MAX) for total system".  
 \*\* Power specifications are a compilation of individual component ratings for EHR40 and ELM.



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