



# EDGE EVO® Solo ESH400-K Networked Controller

Single-Door Access Control System

**Features:**

- Embedded User Interface — no external software requirement.
- Remotely managed using standard web browser.
- Connect to any Wiegand or Hi-O reader. Supports up to 2 readers (purchase of additional add-on boards may be required).
- Web Browser Security — uses SSL 3.0 (Secure Socket Layer) and TLS 3.1(Transport Layer Security) to establish a secure web browser connection.
- Network Configuration — Works within DHCP or Static IP networks for plug and play installation.
- Multi Language Support — Supports the following languages: English, French, German, Spanish (International), Russian, Portuguese (Brazilian), Italian, Chinese (Simplified), Japanese, Korean, Dutch and Turkish.
- All-in-One UI Page — “Door Dashboard” accesses door commands, status, alarms, and recent events from all screens.
- Back-up and restore of data from user PC.
- User upgradable firmware.
- Manages Card only, PIN only, Card and PIN transactions.
- Manages up to 1000 cardholders/credentials.
- Manages 8 schedules and 3 intervals each day.
- View last 5000 events.
- Standardized report generation, including CSV export
- First Person In (Snow day) and PIN suppression schedules.
- Built-in 802.3af Power over Ethernet (PoE), with 9.6 W available for readers, external field devices and locking hardware.
- Wet or dry door relays, including 12 or 24 VDC wet relay lock support.
- Interface to Hi-O door hardware and Hi-O compliant readers provides streamlined and smart installation.

## IP INTELLIGENCE AT THE DOOR INCORPORATING ANY READER FOR STAND-ALONE APPLICATIONS

- **Cost-Effective** - Uses Power over Ethernet (PoE) to power reader and door strike. Eliminates the need for separate power supplies for many situations.
- **Remote Management** - Managed over the network through a standard web browser. No software installation necessary.
- **True Flexibility** - Attach any Wiegand access control reader; use Hi-O iCLASS readers for added security.
- **Scalable** - Can be remotely reconfigured through the web browser from stand-alone operation to a system controller in a host environment of multiple controllers.

HID Global's EDGE EVO® Solo ESH400-K Controller is a cost-effective, stand-alone, single-door IP-enabled access control solution that distributes intelligence right to the door. EDGE EVO Solo provides the ability to power all devices around a door using Power over Ethernet (PoE), significantly reducing total door installation costs by removing the need to install a separate power supply. It also utilizes less expensive CAT5 wiring compared to traditional structured cable.

Because the user interfaces to the controller utilizes a standard web browser, there is no need to install software on a PC. After the controller is plugged into the local area network (LAN), it obtains its IPv4 address using DHCP or Static addressing. The user simply types the IP address into the web browser, which initiates a secure connection with the stand-alone panel. The All-in-One Door Dashboard provides a simple user interface where the site administrator can add user information, modify access rights, pull history reports, monitor door activity and provide general administration of the controller.

The easy-to-use user interface enables a number of simple access controller management features. The solution also enables electronic access control for sites with one or two doors and a card population of 10's or 100's of cards.

The flexible ESH400-K Controller offers a wide range of card to reader interoperability. With a separately connected reader, the ESH400-K is a perfect solution for migrating existing reader installations to the “edge” of the network. The controller connects to any Wiegand reader, providing the flexibility to choose card/reader technology such as iCLASS SE or to use existing card and reader populations already on site.

Built on HID Global's OPIN® development platform, EDGE EVO Solo can be remotely reconfigured through the web browser from stand-alone operation to a system controller in a host environment of multiple controllers.



## Mounting Options:

Always mount in environmentally protected and secure area.

- US Single/Double-gang style electrical box.
- EU/APAC 60mm round style electrical box.
- Reverse Mount Accessory available for flush mount in cabinet.

Non-latching wet/dry relay outputs for:

- 1 door strike.
- 1 auxiliary device: door held/forced alarm, alarm shunt, host offline (communications down), or general purpose.

Inputs for:

- Door monitor switch.\*\*
- Request-to-Exit switch.\*\*
- AC Fail Monitor.
- Battery Fail Monitor.
- Enclosure Tamper.

Access control readers:

- Up to 2 Wiegand or Hi-O iCLASS Readers.\*\*

Easily Interfaced:

- RJ-45 connector for Ethernet TCP/IP (10/100 Mbps).
- Quick-disconnect screw terminal connectors.
- Software updates easily provided through browser interface.
- Easily upgrades to a hosted software solution through the network interface.

\*Can be configured as a general purpose input

\*\* 2 Readers can be supported as follows (a) 2 x Hi-O iCLASS readers, (b) 1 x Wiegand and 1 x Hi-O iCLASS reader or (c) 2 x Wiegand readers (requires separate purchase of additional Wiegand module model EWM-M).



[hidglobal.com](http://hidglobal.com)

North America: +1 512 776 9000

Toll Free: 1 800 237 7769

Europe, Middle East, Africa: +44 1440 714 850

Asia Pacific: +852 3160 9800

Latin America: +52 55 5081 1650

## SPECIFICATIONS

<b>Model (and Part #)</b>	ESH400-K (83000CKE)
<b>Mounting Holes</b>	US Double-gang, US Single-gang and EU / APAC 60mm
<b>Dimensions</b>	6.1" W x 4.8" H x 1.5" D (154.9 mm x 122.5 mm x 37.1 mm)
<b>Weight</b>	11.3oz (320g)
<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>Communication Ports</b>	Ethernet (10/100), Hi-O CANbus, Wiegand or Clock-and-Data
<b>Certifications*</b>	UL294 (US) Listed Component, CSA 205 (Canada), FCC Class A (US), ICES-003 Class A (Canada), CE Mark EN 301 489-3 EN 55022 EN 50130-4 (EU), C-Tick AS/NZS CISPR 22 (Australia, New Zealand) & Korea (KCC)
<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 +5VDC 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>	9.6W (400mA @ 24VDC)
<b>Wiegand / C&amp;D Reader</b>	7.1W (580mA @ 12.25VDC)
<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>	14.4W (1200mA @ 12VDC)
<b>Wiegand / C&amp;D Reader</b>	3.9W (320mA @ 12.25VDC)
<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>	28.8W (1200mA @ 24VDC)
<b>Wiegand / C&amp;D Reader</b>	7.3W (600mA @ 12.25VDC)
<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
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\*For Plenum rating, install within NEMA Type 1 Enclosure

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