

# Product Datasheet

## H-Bridge Module Module 610-00041

**Class1**

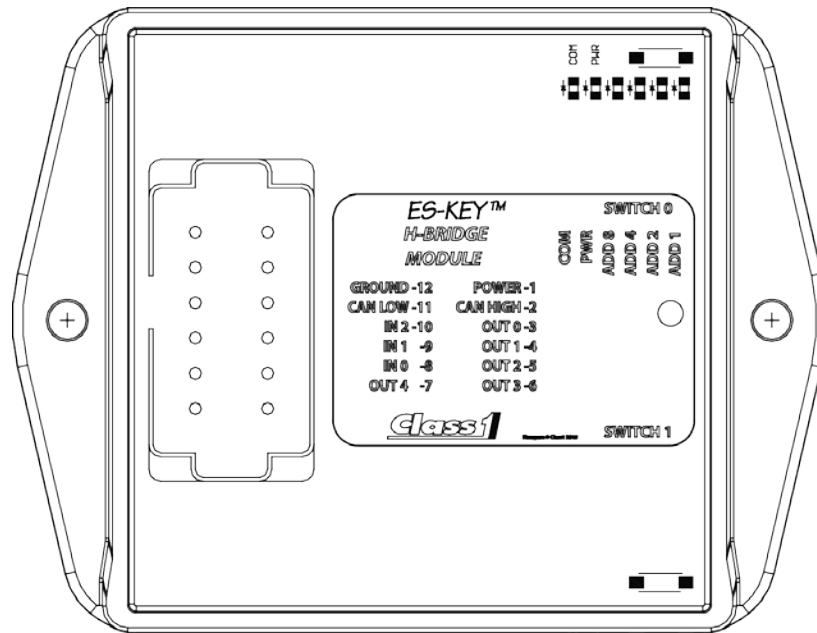
Unit of IDEX Corporation  
607 NW 27th Avenue  
Ocala, FL 34475 U.S.A

Phone: 1.800.533.3569 • 352.629.5020  
Fax: 1.800.520.3473 • 352.629.2902  
www.class1.com

ES-KEY™

### Description

The ES-KEY H-bridge Module was designed to work on the Class1 ES-KEY network as an Input / output module having the ability to also work as a network controlled H-bridge module.



### Features

- System Voltage 10-30 Volts.
- **Potted** sealed enclosure.
- Class1 ES-Key network compatible.
- Temperature range (-40°F [-40°C] to 185°F [85°C]).

### Part Numbers

PART NUMBER	DESCRIPTION
610-00041	H-Bridge Module

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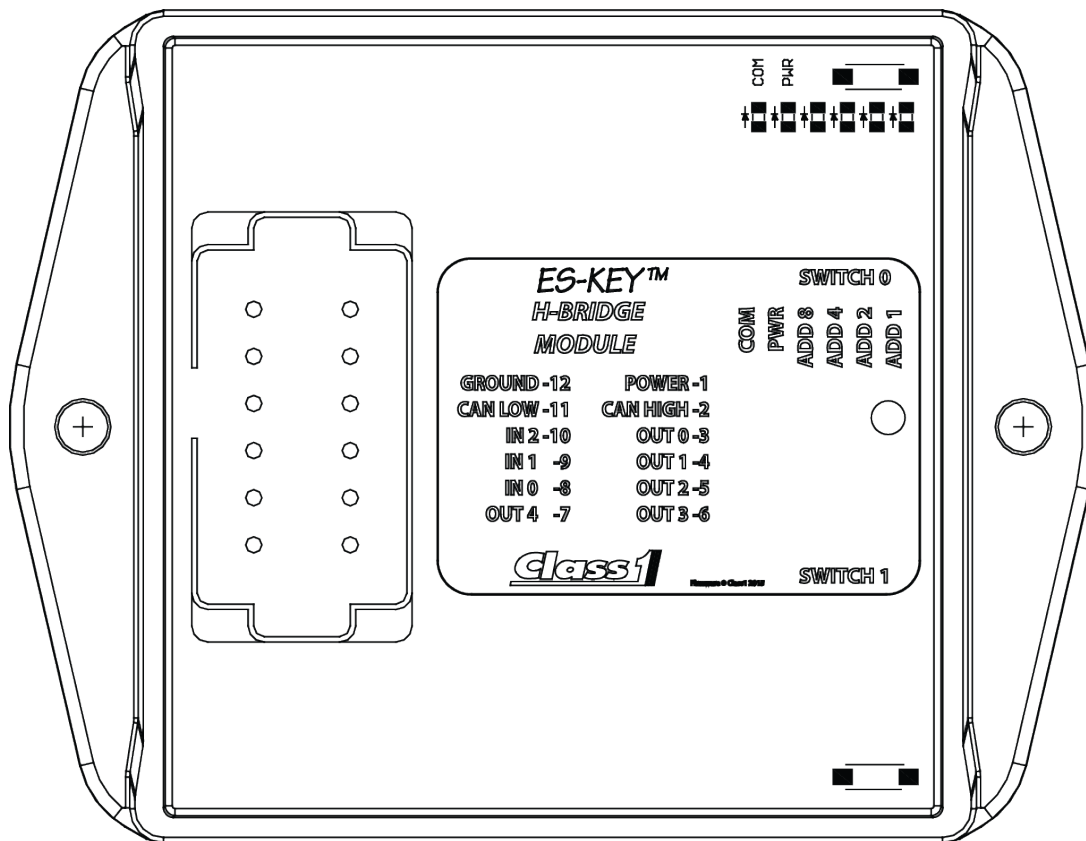
ES-KEY™

### Connections

All power, communication, and input circuits are supplied to the Module through a 12 Position Deutsch connector.

Mating connector: Deutsch DT06-12SA  
Mating sockets: Deutsch 0462-201-16141  
Wedge lock: Deutsch W12S  
Plug Seal: Deutsch 114017  
Recommended wire gage: 16-18 AWG

PIN	CIRCUIT	DESCRIPTION
1	SUPPLY (+)	(INPUT) – battery voltage (+9VDC...+32VDC)
2	CAN HIGH	(DATA) – SAE J1939 CAN 2.0B, 250Kbits/s
3	Output 0	(OUTPUT) – POS / NEG 6 Amp
4	Output 1	(OUTPUT) – POS / NEG 6 Amp
5	Output 2	(OUTPUT) – Ground 500mA
6	Output 3	(OUTPUT) – Ground 500mA
7	Output 4	(OUTPUT) – Ground 500mA
8	Input 0	(INPUT) – Polarity Selectable
9	Input 1	(INPUT) – Polarity Selectable
10	Input 2	(INPUT) – Polarity Selectable
11	CAN LOW	(DATA) – SAE J1939 CAN 2.0B, 250Kbits /s
12	SUPPLY (-)	(INPUT) – battery ground



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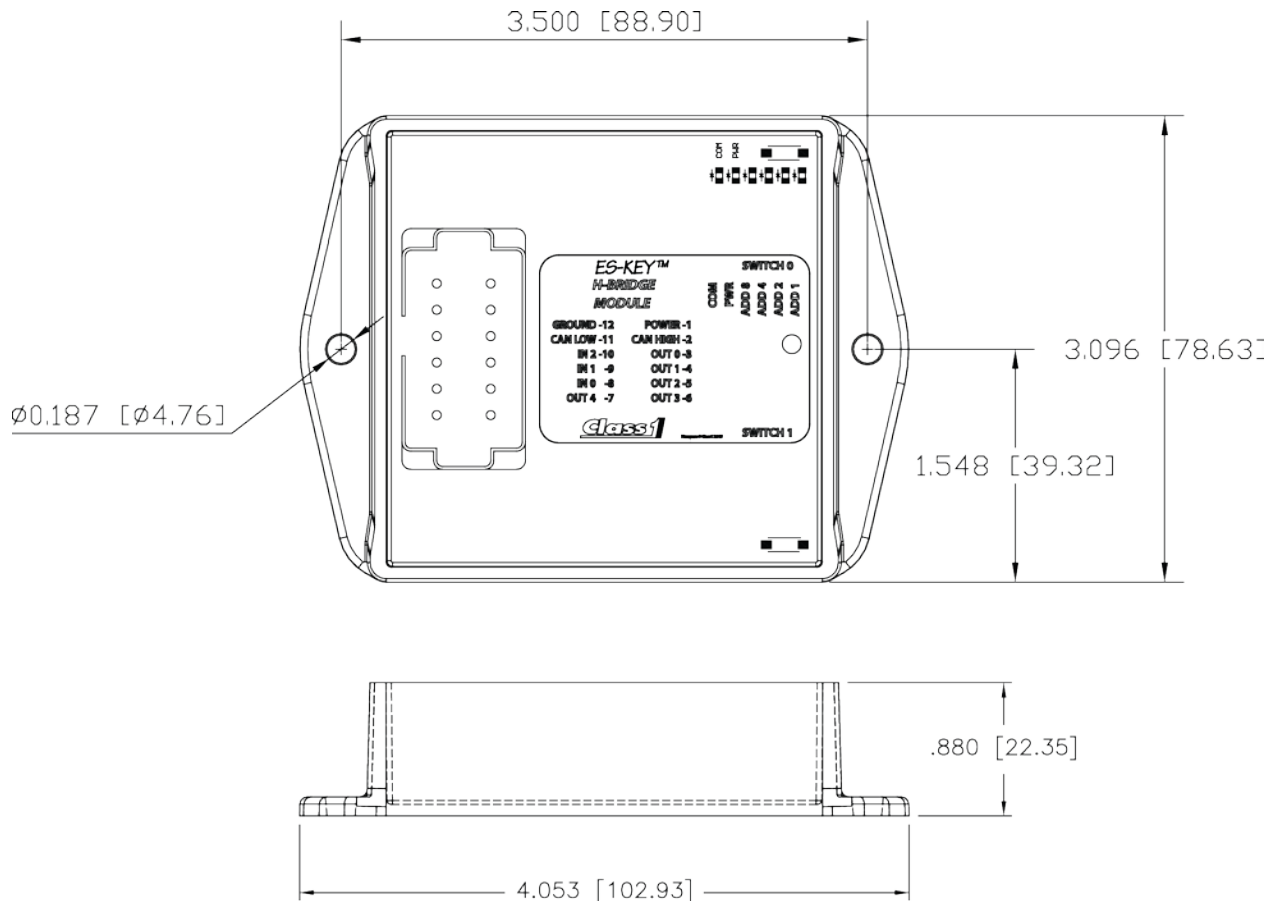
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### Mounting and dimensions



Unit of scale: inches [millimeters]

### Technical details

Product category	ES-Key network
Voltage range	+10VDC...+32VDC
Power consumption	
@13.8VDC	0.030 mA
@27.6VDC	0.050 mA
Operational temperature range	-40°C...+85°C
CAN specification	SAE J1939 proprietary, 250 Kbits/second
Protection	Internal thermal fuse Reverse voltage protection (pins 1 and 12 of connector) CAN buses protected to 24V ESD voltage protected to SAE J1113 specifications Transient voltage protected to SAE J1113 specifications
Dimensions (W x H x D) in inches [mm]	3.500 [88.90] x 3.096 [78.63] x .880 [22.35]