

CANLink[®] CL-411-106 Module I/O Module



The CL-411 is a solid-state microprocessor based module and member of the HED[®] CANLink[®] multiplexed control family. Delivered in an aluminum enclosure, this unit provides a high density I/O count in a compact and economical package.

The CL-411 is designed for use as a stand alone unit or as part of a distributed system

The HED[®] CL-411 can be programmed using HED[®]'s do-it-yourself CANLink[®] Composer[™] programming tool or directly by HED[®] engineering, and is designed for use with the CANLink[®] Conductor[™] software tool for diagnostics and field troubleshooting.

21 Outputs and 18 Inputs including:

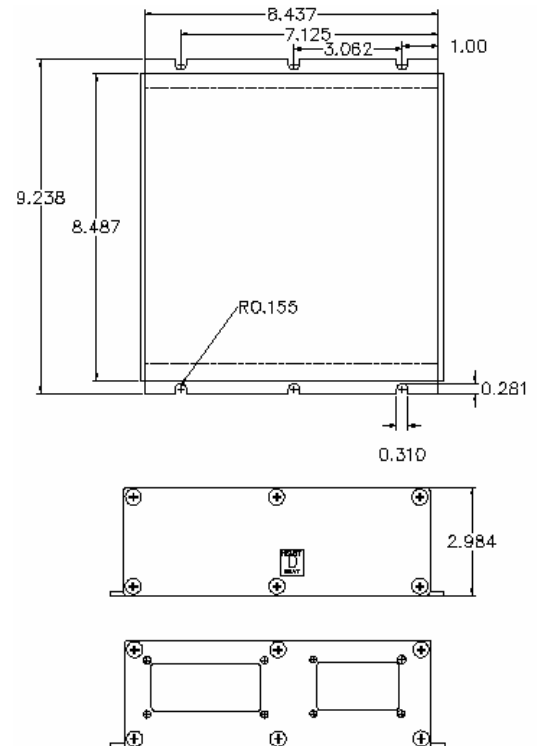
- (11) switch to battery inputs
- (1) switch to ground inputs
- (3) 0-5.0VDC 12-bit analog inputs
- (1) 0-35.2VDC 12-bit analog input
- (1) input configurable as switch to ground or frequency
- (1) input configurable as 0-5.0VDC 12-bit analog or resistive sensor (0-1K ohm RTD)
- (2) harness code* inputs
- (6) 2.5A PWM outputs with estimated current feedback
- (2) 2.5A digital outputs with current limiting
- (8) 4A digital outputs with current limiting
- (2) 6A digital outputs with current limiting
- (3) 15A digital outputs with current limiting
- Battery voltage and sensor supply voltage monitoring
- (2) 5VDC regulated sensor supplies (30mA)
- (2) J1939 CAN ports

Specifications	
Enclosure:	Aluminum extrusion
Mating Connectors:	Deutsch DRC16-40SA
Deutsch	Deutsch DRC16-24SA 0462-201-20141 20AWG sockets 0462-201-16141 16AWG sockets
Operating Voltage Range:	8 to 32 VDC
Operating Temperature:	-40°C to 85°C
Storage Temperature:	-40°C to 85°C
IP Rating:	IP 67
PC Boards:	The printed circuit boards are designed for high EMI/RFI protection. The boards are conformal coated with a silicone coating for further water/moisture protection. All inputs and outputs are protected against shorts to Battery(+) or Battery(-). 100% of the boards are functionally tested before shipment. * Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller

CL-411-106 I/O Module

CL-411-106 I/O Module Pinout

DRC13-40PA 40-Pin Connector		DRC13-24PA 24-Pin Connector	
Pin	Function	Pin	Function
1	Output #1 DOUT(+)(15A)	1	Output #12 DOUT(+)(6A)
2	Output #2 DOUT(+)(4A)	2	Output #13 DOUT(+)(6A)
3	Output #3 DOUT(+)(4A)	3	BAT(+) Outputs 12, 13, 17
4	Output #4 DOUT(+)(4A)	4	Output #14 DOUT(+)/PWM(+)/ECC(+)(2.5A)
5	Output #5 DOUT(+)(4A)	5	Output #15 DOUT(+)/PWM(+)/ECC(+)(2.5A)
6	Output #6 DOUT(+)(4A)	6	Output #16 DOUT(+)/PWM(+)/ECC(+)(2.5A)
7	Output #7 DOUT(+)(4A)	7	Output #17 DOUT(+)(2.5A)
8	Output #8 DOUT(+)(4A)	8	Shield
9	Output #9 DOUT(+)(4A)	9	Output #18 DOUT(+)/PWM(+)/ECC(+)(2.5A)
10	BAT(+) Outputs 6,7,8,9	10	Output #19 DOUT(+)/PWM(+)/ECC(+)(2.5A)
11	BAT(+) Module and Output 1 / Input #19 Battery Voltage	11	Input #14 STG/FREQ
12	HID #1	12	Output #20 DOUT(+)/PWM(+)/ECC(+)(2.5A)
13	HID #2	13	Output #21 DOUT(+)(2.5A)
14	Input #1 STG	14	Input #15 STB
15	Input #2 AIN(0-35.2V)	15	Input #16 STB
16	BAT(+) Outputs 2, 3, 4, 5	16	Input #17 STB
17	5VDC Sensor Supply #1 (30mA) / Input #20 Sensor Supply #1 Voltage	17	Input #18 STB
18	5VDC Sensor Supply Ground	18	BAT(+) Outputs 14, 15, 16, 18, 19, 20
19	Shield	19	BAT(+) Outputs 11
20	BAT(+) Outputs 10, 21	20	CAN2-L
21	Input #3 AIN(0-5.0V)	21	CAN2-H
22	Input #4 AIN(0-5.0V)	22	RS232 (Tx)
23	Input #5 STB	23	RS232 (Rx)
24	Input #6 STB	24	RS232 (GND)
25	Input #7 STB		
26	Input #8 AIN(0-5.0V)		
27	Input #9 STB		
28	Input #10 STB		
29	Shield		
30	Output #10 DOUT(+)(15A)		
31	BAT(-) Module		
32	5VDC Sensor Supply #2 (30mA) / Input #21 Sensor Supply #2 Voltage		
33	5VDC Sensor Supply Ground		
34	Input #11 AIN(0-5.0V)/RTD(0-1Kohm)		
35	Shield		
36	CAN1-L		
37	CAN1-H		
38	Input #12 STB		
39	Input #13 STB		
40	Output #11 DOUT(+)(15A)		



Note: Above pinout is for HED® part number CL-411-106.
Additional part number data sheets available on HED® website.