

CANLink[®] CL-420-1XX Module Family I/O Module

18 Inputs and 10 Outputs including:



The CL-420 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 large and highly flexible I/O count in a compact package.

The CL-420 is designed for use as a multi-purpose stand alone unit or as a master controller in a distributed system.

The HED[®] CL-420 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.

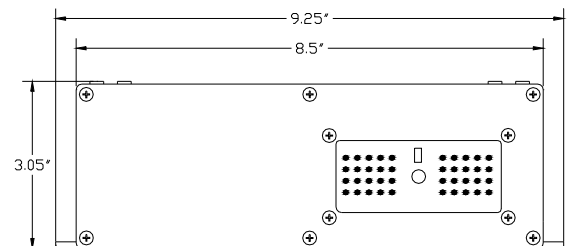
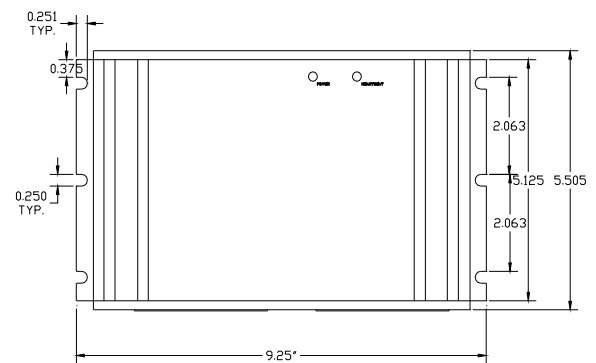
- (3) inputs software configurable as switch to ground, 12-bit analog, or resistive sensor input (RTD)
- (5) inputs software configurable as switch to ground or 12-bit analog
- (4) switch to battery inputs
- (4) Inputs software configurable as switch to ground, frequency¹ or harness code²
- (1) 10-bit analog input
- (1) 5VDC regulated sensor supply (700mA) or 10-bit analog input (hardware configurable)
- (8) 3A PWM outputs with estimated current feedback
- (2) 3A outputs configurable as:
 - (2) PWM and (0) digital outputs, (2) frequency inputs¹
 - (1) PWM and (1) digital outputs, (3) frequency inputs¹
 - (0) PWM and (2) digital outputs, (4) frequency inputs¹
- (2) J-1939 CAN ports
- (1) RS232 or USB port (hardware configurable)

Specifications	
Enclosure:	Aluminum Extrusion
Mating Connectors: Deutsch	Deutsch DRC16-40SA 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.
<ol style="list-style-type: none"> 1. Number of frequency inputs capable depends on output configuration. 2. Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller. 	

CL-420 I/O Module

CL-420 I/O Module Pinout

DRC13-40PA 40-Pin Connector			
Pin	Function	Pin	Function
1	Output DOUT(+)/PWM(+)/ECC(+)(3A)	21	BAT(-)
2	Output DOUT(+)/PWM(+)/ECC(+)(3A)	22	Input STG/Freq
3	Output DOUT(+)/PWM(+)/ECC(+)(3A)	23	Input STG/Freq
4	Output DOUT(+)/PWM(+)/ECC(+)(3A)	24	Input STG/Freq
5	Output DOUT(+)/PWM(+)/ECC(+)(3A)	25	Input STG/Freq/Unswitched Battery(+)**
6	Output DOUT(+)/PWM(+)/ECC(+)(3A)	26	Input STG/AIN
7	Output DOUT(+)/PWM(+)/ECC(+)(3A)	27	Input STG/AIN
8	Output DOUT(+)/PWM(+)/ECC(+)(3A)	28	Input STG/AIN
9	Output DOUT(+)/PWM(+)(3A)	29	Input STG/AIN
10	Output DOUT(+)/PWM(+)(3A)	30	Input STG/AIN
11	Input STB	31	RS232 (GND) or USB (GND)
12	Input STB	32	RS232 (TX) or USB (DP)
13	Input STB	33	RS232 (RX) or USB (DM)
14	Input STB	34	5VDC Sensor Supply (700mA) / Input Sensor Supply Voltage or AIN
15	BAT(+) Module and Outputs / Input Battery Voltage	35	Input AIN / CAN (Shield)
16	Flyback Ground	36	CAN1-L
17	Input STG/AIN/RTD	37	CAN1-H
18	Input STG/AIN/RTD	38	CAN (Shield)
19	Input STG/AIN/RTD	39	CAN2-L
20	BAT(+) Outputs and 5V Supply / Input Battery Voltage	40	CAN2-H



Note: Different I/O combinations are available. Please refer to specific CL-420-1XX data sheet for I/O number designations for use within Composer™. Data sheets available on HED® website.

*Unswitched vehicle battery must be connected to properly store data to EEPROM. Module will draw max of 200 micro amps (12V) and 400 micro amps (24V) after turning itself off. This feature is only available on versions of this module that are Master Module capable.