

CANLink[®] CL-421-1XX Module Family I/O Module

18 Inputs and 12 or 14 Outputs including:

- (10) switch to battery inputs
- (4) inputs software configurable as switch to ground, 12-bit analog or harness code¹
- (4) inputs software configurable as switch to ground or 12-bit analog
- (7) 3A PWM outputs²
- (3) 3A outputs software configurable as Digital or PWM^{2,3}
- (2) or (4) 200mA outputs³ software configurable as:
 - (0) 200mA sinking PWM, (2) servo⁴
 - (2) 200mA sinking PWM, (1) servo⁴
 - (4) 200mA sinking PWM, (0) servo⁴
- (1) 5VDC regulated sensor supply (250mA) or 10-bit analog input (hardware configurable)
- (1) J1939 CAN ports



The CL-421 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-421 is designed for use as a multi-purpose stand alone unit or as a master controller in a distributed system.

The HED[®] CL-421 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.

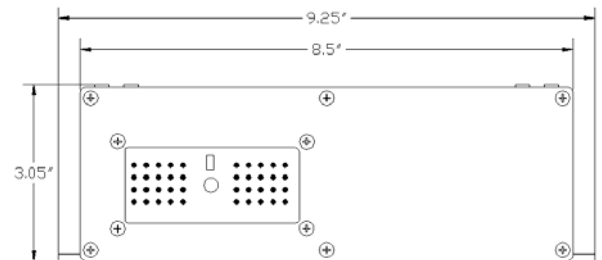
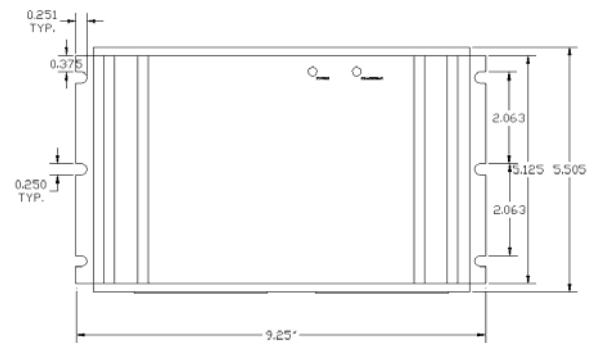
Specifications

Enclosure:	Aluminum Extrusion
Mating Connectors:	Deutsch DRC16-40SB
Deutsch	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. Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller. 2. These outputs may require external flyback diodes when used with certain PWM valves. 3. Total of 11 PWM outputs is possible from module. Each servo output counts as 2 PWM outputs. 4. (1) servo can also be (2) 200mA sinking digital or PWM. Sourcing side of servo is 5V not battery, and is intended for driving EDC valves. 	

CL-421 I/O Module

CL-421 I/O Module Pinout

DRC13-40PB 40-Pin Connector			
Pin	Function	Pin	Function
1	Output DOUT(+)/PWM(+)(3A)	21	BAT(-) Module
2	Output DOUT(+)/PWM(+)(3A)	22	Input STG/AIN
3	Output DOUT(+)/PWM(+)(3A)	23	Input STG/AIN
4	Output DOUT(+)/PWM(+)(3A)	24	Input STG/AIN
5	Output DOUT(+)/PWM(+)(3A)	25	Input STG/AIN
6	Output DOUT(+)/PWM(+)(3A)	26	5VDC Sensor Supply (250mA) / Input Sensor Supply Voltage or AIN
7	Output DOUT(+)/PWM(+)(3A)	27	Input STB
8	Output DOUT(+)/PWM(+)(3A)	28	Input STB
9	Output DOUT(+)/PWM(+)(3A)	29	Input STB
10	Output DOUT(+)/PWM(+)(3A)	30	Input STB
11	Output DOUT(-)/PWM(-)/Servo1A(0.2A)	31	Servo Ground
12	Output DOUT(-)/PWM(-)/Servo1B(0.2A)	32	Input STG/AIN
13	Output DOUT(-)/PWM(-)/Servo2A(0.2A)	33	Input STG/AIN
14	Output DOUT(-)/PWM(-)/Servo2B(0.2A)	34	Input STG/AIN
15	BAT(+) Module and Outputs / Input Battery Voltage	35	Input STG/AIN
16	5V Sensor Ground	36	Input STB
17	Input STB	37	Input STB
18	Input STB	38	Input STB
19	Input STB	39	CAN-L
20	BAT(+)Outputs and 5V Supply / Input Battery Voltage	40	CAN-H



Note: Different I/O combinations are available. Please refer to specific CL-421-1XX data sheet for I/O number designations for use within Composer™. Data sheets available on HED® website.