



Representative Product Photo

## CANLink<sup>®</sup> CL-424-101 Module Master I/O Module (12V) with LED I/O Indicators

### 10 Inputs and 8 Outputs including:

- (7) 2A digital or PWM outputs<sup>2,3</sup>
- (1) 6A digital or PWM output with current limiting<sup>2,3</sup>
- (6) switch to battery inputs
- (1) input software configurable as switch to battery or 10-bit analog input
- (1) input software configurable as switch to ground or frequency
- (2) switch to ground inputs
- (2) J1939 CAN port

The CL-424 is a solid-state microprocessor based module and member of the HED<sup>®</sup> CANLink<sup>®</sup> multiplexed control family. Delivered in a Deutsch enclosure, this unit provides a high density I/O count in a compact and economical package.

Designed for use as a stand alone unit or as part of a distributed system, the CL-424 is also available in a clear enclosure with LED indicators for each input for simple troubleshooting in the field.

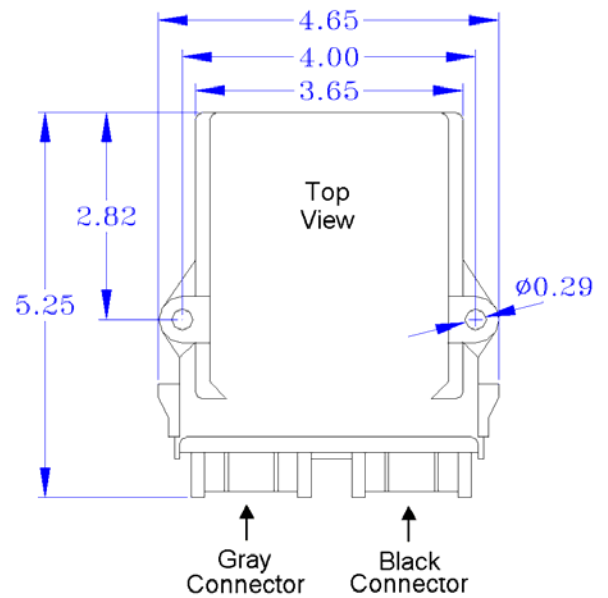
The HED<sup>®</sup> CL-424 can be programmed using HED<sup>®</sup>'s do-it-yourself CANLink<sup>®</sup> Composer<sup>™</sup> programming tool or directly by HED<sup>®</sup> engineering, and is designed for use with the CANLink<sup>®</sup> Conductor<sup>™</sup> software tool for diagnostics and field troubleshooting.

| Specifications  |   |
|---|---|
| Enclosure:  | Deutsch standard EEC-325x4 PCB enclosure with 24-pin receptacle.  |
| Mating Connectors:<br>Deutsch   | DTM06-12SA<br>DTM06-12SB<br>WM-12S (wedge) – Two needed (one per connector)<br>0462-201-20141 20AWG sockets<br>0413-204-2005 Sealing Plugs – Unused pins are required to be sealed to maintain module sealing   |
| Operating Voltage Range:  | 8-18 VDC  |
| Operating Temperature:  | -40°C to 70°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.<br>The boards are conformal coated with a silicone coating for further water/moisture protection.<br>All inputs and outputs are protected against shorts to Battery(+) or Battery(-).<br>100% of the boards are functionally tested before shipment. |
| <ol style="list-style-type: none"> <li>1. Harness codes are switch to ground inputs used to identify I/O module location and function to the master controller.</li> <li>2. Maximum combined output current is 10A.</li> <li>3. User installed flyback clamping diode may be required for PWM mode with inductive loads.</li> </ol> |   |

## CL-424-101 Master I/O Module

### CL-424-101 Master I/O Module Pinout

| DTM13-12PA (Gray) |                               | DTM13-12PB (Black) |                               |
|-------------------|-------------------------------|--------------------|-------------------------------|
| Pin               | Function                      | Pin                | Function                      |
| 1                 | Input #5 STB                  | 1                  | Output #2 DOUT(+)/PWM(+)*(2A) |
| 2                 | Input #6 STB                  | 2                  | Output #3 DOUT(+)/PWM(+)*(2A) |
| 3                 | Input #7 STB                  | 3                  | Output #4 DOUT(+)/PWM(+)*(2A) |
| 4                 | Input #8 STB                  | 4                  | Output #5 DOUT(+)/PWM(+)*(2A) |
| 5                 | Input #9 STB                  | 5                  | Output #6 DOUT(+)/PWM(+)*(2A) |
| 6                 | Input #10 STB                 | 6                  | Output #7 DOUT(+)/PWM(+)*(2A) |
| 7                 | Input #4 STB/AIN              | 7                  | Output #8 DOUT(+)/PWM(+)*(2A) |
| 8                 | Output #1 DOUT(+)/PWM(+)*(6A) | 8                  | CAN2-L                        |
| 9                 | CAN1-L                        | 9                  | CAN2-H                        |
| 10                | CAN1-H                        | 10                 | Input #1 STG/FRQ              |
| 11                | BAT(-) Module                 | 11                 | Input #2 STG                  |
| 12                | BAT(+) Module and Outputs 1-8 | 12                 | Input #3 STG                  |



Note: Above pinout is for HED<sup>®</sup> part number CL-424-101.  
 Different I/O combinations are available.  
 Additional part number data sheets available on HED<sup>®</sup> website.

Note: Maximum combined current of all outputs is 10A.

\*Note: External clamping diodes may be required by user to be installed across load for clamping of inductive flyback voltage spikes to Ground when outputs are operated in PWM mode. Without external user supplied clamping diode to Ground, hydraulic valve coils may not function as expected.

