

## Opto-isolation Module for the LC/DSP and 104/DSP

Optical Isolation for all dedicated and user I/O of the LC/DSP and 104/DSP motion controllers. Replaces the standard 50 pin Phoenix Contact terminal block with an active terminal block of the same size. The only pinout difference is the use of a user-provided opto-Vcc and opto-GND which can be anywhere between 5V and 24V.

Two micro SMT switches allow the user to set the direction of the 3 user I/O ports.

### Features

#### *Optically Isolated Dedicated I/O:*

- 5000 VAC optical isolation on all inputs, including
  - positive and negative limit switch
  - home inputs
  - amp fault inputs
- Also on all outputs, including
  - amp enable
  - in position
- 24 VDC logic levels

#### *High Current, Optically Isolated User I/O*

- 5000 VAC optical isolation on all I/O
- Outputs are open collector transistor with 150 mA drive
- Fused outputs with automation fuse reset
- 24 VDC logic levels

### Specifications

- Operating Ambient Temperature: -30° to 100° C
- Isolation Input-to-Output: 5000 Vrms
- Output Voltage Drop: 0.4 Volts @ 0.5 mA
- Maximum Output Current, User I/O: 150 mA
- Maximum Output Current, Ded I/O: 2.4 mA
- Output Leakage Current: 0.5  $\mu$ A @ 40 VDC
- Output Breakdown Voltage: 40 VDC
- Opto-Voltage: 24 VDC
- Input Current @ Max line: 50 mA
- Rise Time, User I/O: 200  $\mu$ s @ 24 VDC
- Rise Time, Dedicated I/O: 100  $\mu$ s @ 24 VDC
- Fall Time, User I/O: 10  $\mu$ s @ 24 VDC
- Fall Time, Dedicated I/O: 10  $\mu$ s @ 24 VDC
- Output Supply Voltage: 24 VDC
- Fuse trip current: 1 A