

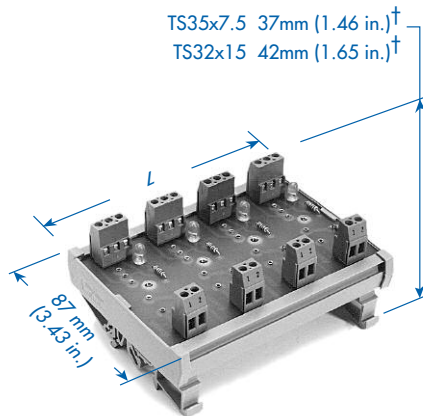
INTERFACES

I/O Opto Carrier
35 or 32mm DIN Rail

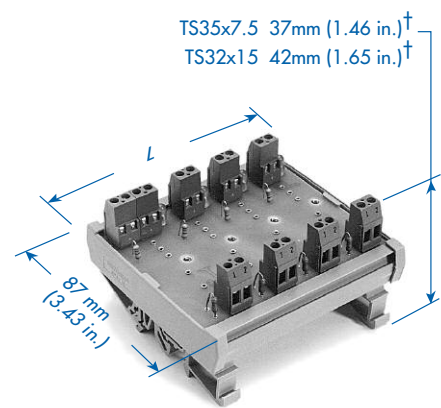
Mount standard opto coupler input/output (I/O) modules in a high density arrangement for logic output to field devices, or for input of field data to the controller. I/O modules optically isolate ICs and PLCs from damaging field voltage spikes and line noise, while controlling up to 3 Amp field current with less than 20mA logic current. Altech I/O Module Carriers can accept up to 16 industry standard 0.6 in. (15.24mm) I/O modules in any combination: Input, Output, AC or DC from most manufacturers.

- Screw-Cage Clamp Connection
- Integral Sockets, Retaining Nut
- Field Voltage Rating: 280V AC/DC^a
- LED Indication, Fuse Protection
- DIN Rail Mount, Panel Mount Available

Custom designs can be accommodated!

I/O I
Isolated

Low current LED with dropping resistor for high resistance pull-up and low logic sink/source current requirements.

I/O B
Bussed

Logic status LED which uses the I/O module impedance as its dropping resistor.

Wire Range	Fuse Rating
22-12AWG	0.5-4mm ² 5A/125V AC ^b

Wire Range	Fuse Rating
22-12AWG	0.5-4mm ² 5A/125V AC ^c

Ordering Information	LED	Type	Cat. No.	Length (L) mm (in.)	Type	Cat. No.	Length (L) mm (in.)
I/O Opto Carrier, Isolated Positions							
1 Position, Logic Voltage							
5V DC	Green	I/O I-1B	8954.0/B	34.5 (1.36)			
15V DC	Yellow	I/O I-1E	8954.0/E	34.5 (1.36)			
24V DC	Red	I/O I-1G	8954.0/G	34.5 (1.36)			
2 Position, Logic Voltage							
5V DC	Green	I/O I-2B	8955.0/B	57.8 (2.28)			
15V DC	Yellow	I/O I-2E	8955.0/E	57.8 (2.28)			
24V DC	Red	I/O I-2G	8955.0/G	57.8 (2.28)			
4 Position, Logic Voltage							
5V DC	Green	I/O I-4B	8956.0/B	114 (4.49)			
15V DC	Yellow	I/O I-4E	8956.0/E	114 (4.49)			
24V DC	Red	I/O I-4G	8956.0/G	114 (4.49)			
8 Position, Logic Voltage							
5V DC	Green	I/O I-8B	8957.0/B	226 (8.90)			
12V DC	Yellow	I/O I-8E	8957.0/E	226 (8.90)			
24V DC	Red	I/O I-8G	8957.0/G	226 (8.90)			

I/O Opto Carrier
Bussed Positions

4 Position, Logic Voltage 5 to 24V DC	Green				I/O B-4	8956.0	114 (4.49)
8 Position, Logic Voltage 5 to 24V DC	Green				I/O B-8	8959.0	183 (7.20)
16 Position, Logic Voltage 5 to 24V DC	Green				I/O B-16	8861.0	363 (14.30)

Std. Pk.: 1

[†]Dimension is to top board, add height of relay to determine clearance.

^b3A/250V fuse available, please consult Altech.

Std. Pk.: 1

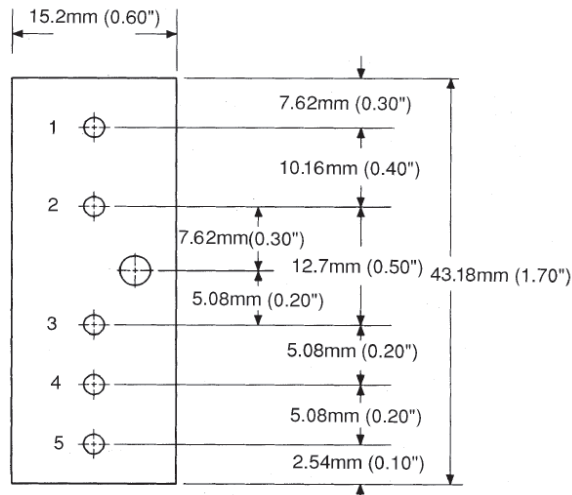
[†]Dimension is to top board, add height of relay to determine clearance.

^c3A/250V fuse available, please consult Altech.

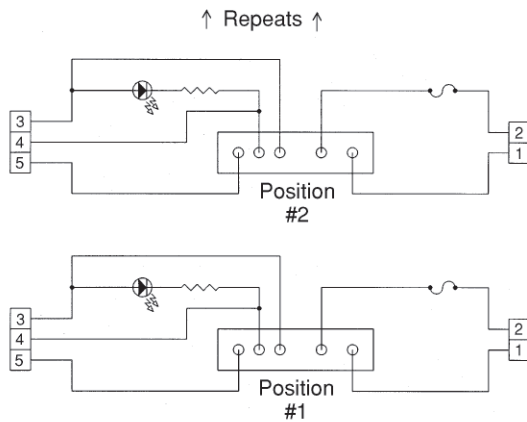
^aFuse rating limits field side rating.

- PCB Traces, Field Side : 10A/300V
- PCB Traces, Logic Side: 1A with 6A Bus
- Terminal Blocks: 15A/300V

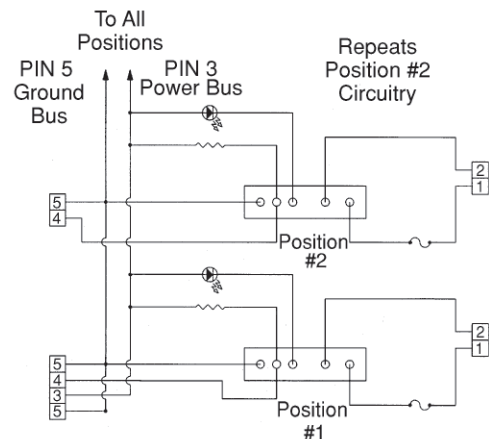
Standard Pinout



I/O I Isolated Positions



I/O B Bussed Positions



Standard Pinout

The I/O Module pin utilization information listed below is intended for use only as a guide. For specific applications, please use only the module manufacturer's published specifications.

Pins 1 & 2: Field Connections

- AC Output to field load, inductive up to 3.5A at nominal 24V AC, 120V AC or 240V AC. AC hot to either pin, field load on other pin.
- DC Output to field load (inductive OK with commutating diode). Some modules polarized with pin #1 positive (+). Standard output voltages 60V DC (5-60), 200V DC (10-200).
- AC Input of field data to the logic, 10mA max at nominal 24V AC (18-36), 120V AC (90-140) and 240V AC (90-280). Field signal to either pin.
- DC Input of field data to the logic, some modules dual rated AC/DC, other nominal 5-28V DC (min. 4, max. 32), and nominal 12-48V DC (min. 10, max. 60). Some modules polarized with pin #1 (+).

Pin 3: VCC Logic Power

- Standard modules are available in three nominal logic voltages: 5V DC (normally min. 3 to max. 6), 15V DC (12 to 18) and 24V DC (20 to 30).

Pin 4: Logic Signal

- Output - Logic ground (sink) on pin #4 closes output circuit (pin #1 to pin #2 normally open, shorts with sink on input pin #4). A few positive-logic modules are available.
- Input - Field signal to pins #1 and #2 gives 20-25mA sink at pin #4 (to pin #5).

Pin 5: Logic Ground

- On input modules only (no pin #5 on output modules).