

X22-ST-850— Bi-directional Optical to TTL Converter 850 nm

Features

- Converts fiber-optic signals to TTL, and TTL to fiber-optic
- Selectable polarity
- Compact package
- Low latency and jitter
- Square wave transmission up to 50 MHz
- DC operation



Applications

- EMI-immune trigger and logic level signal delivery in distributed systems
- Long-range digital signal transmission
- Frequency transmission
- High voltage isolation
- General-purpose optical-TTL signal conversion

Specifications

Fiber-optic input	Broadcom HFBR-2418Z receiver (ST bayonet), 850 nm light (near infra-red)
TTL output	47 ohm output series impedance driving TTL levels into ≥ 5 kohm. Polarity switch-selectable for the output to be the same or inverted relative to the fiber-optic input.
TTL input	TTL levels, input impedance 1 Mohm .
Fiber optic output	Broadcom HFBR-1415Z 50 MBd transmitter (ST bayonet) , 850 nm light (near infra-red) Polarity switch-selectable for output to be the same or inverted relative to the TTL input.
Propagation delay	≤ 15 nsec optical to TTL ≤ 15 nsec TTL to optical
Propagation jitter	< 1 nsec
Frequency range	DC to 50 MHz (50% duty cycle square wave)
Power input	+24 +/- VDC, 100 mA max. Fused 1.1 A.



Connectors

Fiber optics	ST bayonet. Recommended fiber 62.5/125 step index multimode,
TTL	BNC jacks 50 ohm, two. Signal on core.
24 VDC input	2.1 mm threaded jack. Mate with Switchcraft S761K or equivalent. Pin: +24 VDC; Shell: 0V
Ground	Case grounded via mounting flange

Controls and indicators

Polarity switches	Independent toggle switches for optical to TTL, and TTL to optical.
Indicators	Power on green LED

Case

Type	Stainless steel sheet with mounting flange, IP43.
Weight	0.20 kg (0.44 lb)

Environment

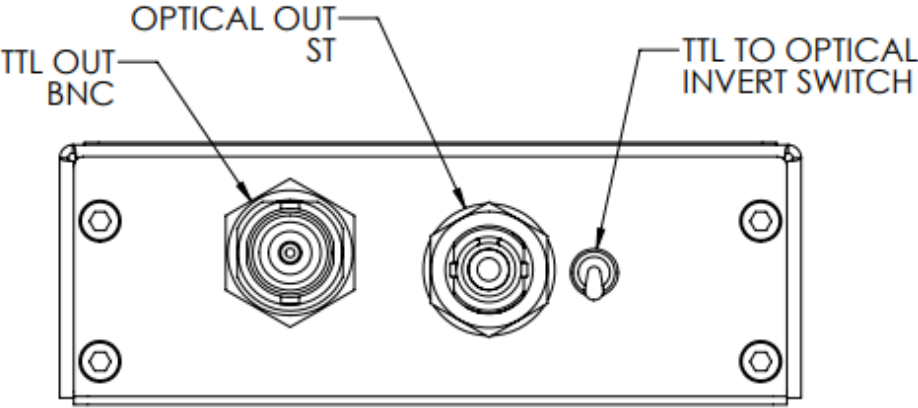
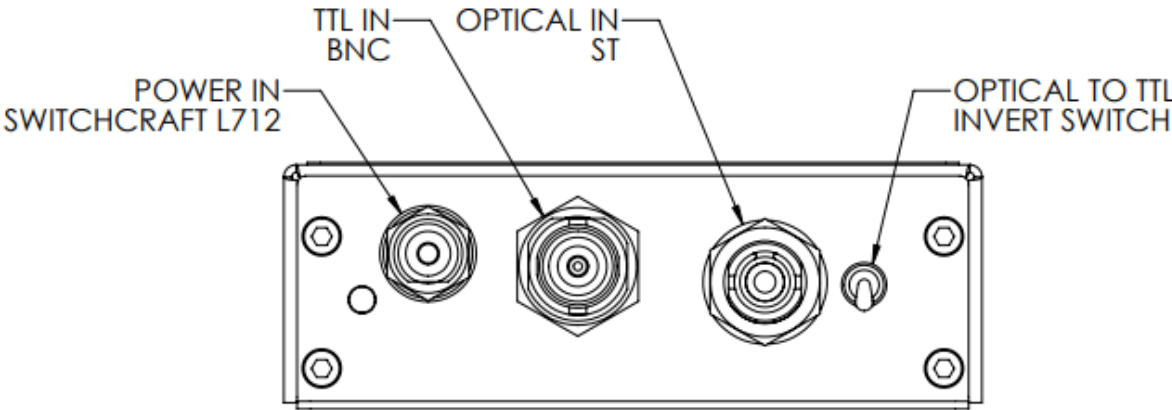
Operating environment	10 to 35C, < 80% humidity, non-condensing, vibration < 0.2 g all axes, 1 to 100Hz
Storage environment	0 to 50C, < 80% humidity, non-condensing, vibration < 2g all axes, 1 to 100Hz

Ordering information

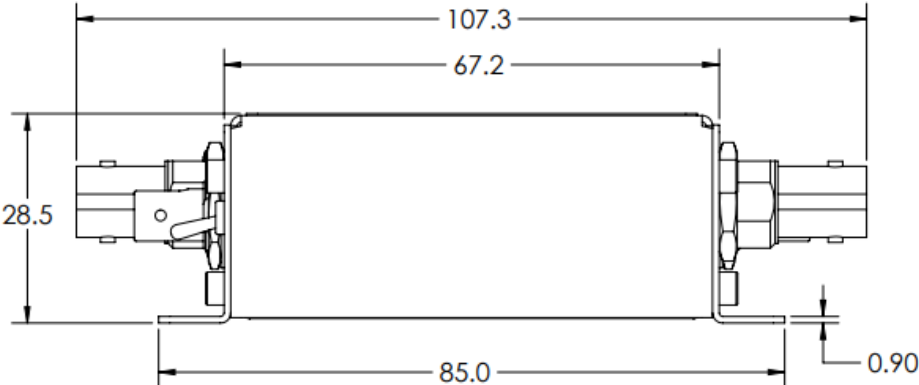
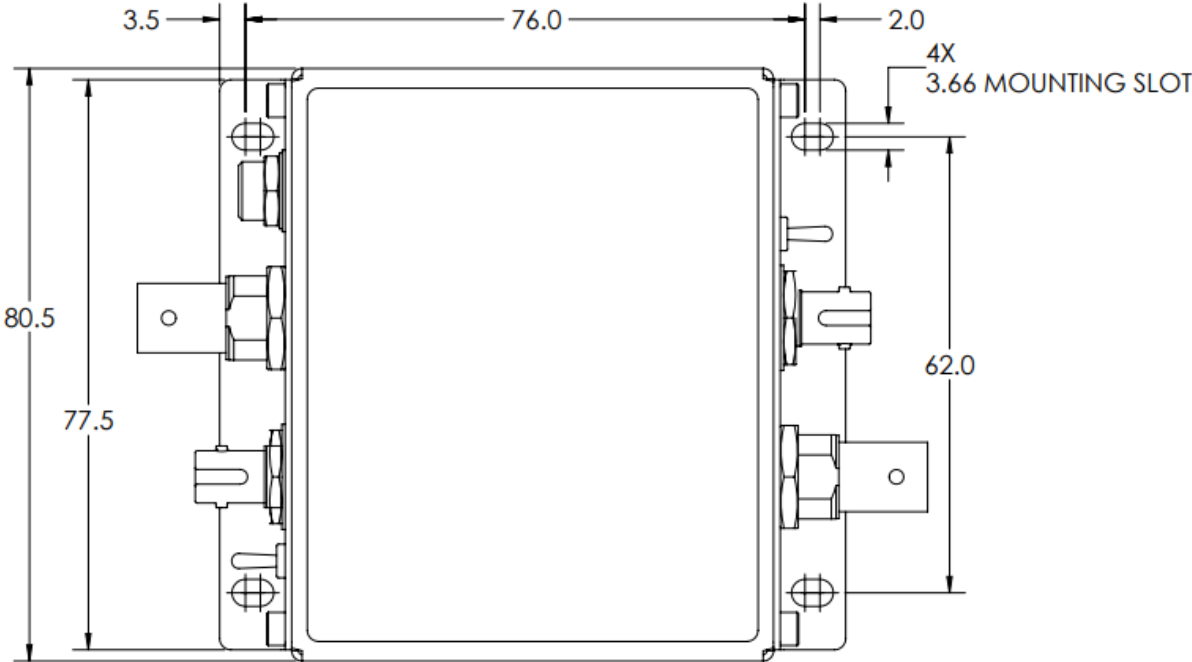
X22-850	Bi-directional Optical to TTL converter, ST bayonet fiber optic connectors
MTG-DIN35-7662	DIN rail mounting adaptor
PSU24-25-1	Universal 24 VDC power supply, medical rated, 25 W, C8 line inlet, Switchcraft S761 threaded jack outlet.



Connectors



Mounting & Dimensions



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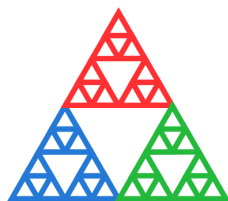
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