

Model 10889A, 6 Output Fiber-Optic to Logic Adapter Operating Instructions



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General Description

The Model 10889A Fiber-Optic to Logic Adapter converts signals received via optical fiber into CMOS logic levels. The received signal is distributed to six individually-buffered outputs, each using a two-pin connector. Mating connectors are supplied with the unit.

The outputs deliver 0 V to 5 V logic signals¹, with a high output corresponding to fiber illumination. A green light-emitting diode (LED) is lighted whenever the output levels are high.

The 10889A is powered by an external +9.0 Vdc to +13.5 Vdc source. With all outputs fully loaded, the input current required will be less than 250 mA. A second green LED indicates that power is supplied to the unit. Power is supplied via a two-pin header, with included mating connector. The input is protected against reverse polarity.

Specifications

Input:	Fiber-optic signal via a 62.5/125 μm fiber; -10 dB to -24 dB input level. Compatible with 50/125 μm , 100/140 μm , or 200 μm PCS Fiber.
Output:	+5 V CMOS signal via 6 two-terminal headers (mating connectors supplied).
Impedance:	10 Ω
Source/Sink Capability:	$\pm 75\text{ mA}$ maximum per output, for 50% maximum duty cycle.
Power Input:	+9.0 Vdc to +13.5 Vdc, 250 mA
Size:	102 mm \times 56 mm \times 42 mm (4.0 in \times 2.2 in \times 1.7 in), including mating connectors.
Weight:	165 g (5.8 oz)
Temperature:	Operating: $-10\text{ }^\circ\text{C}$ to $+50\text{ }^\circ\text{C}$ Non-operating: $-40\text{ }^\circ\text{C}$ to $+75\text{ }^\circ\text{C}$

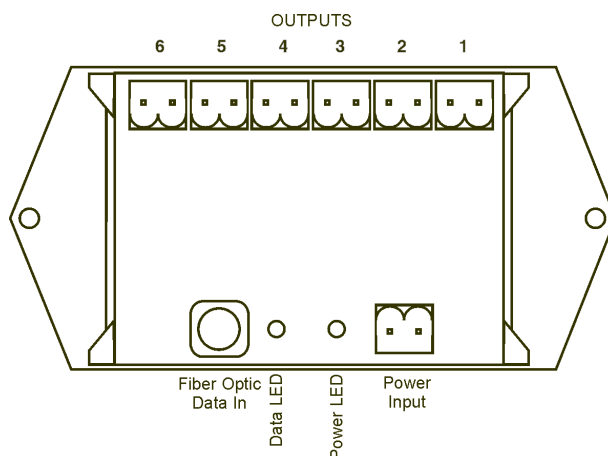


Figure 1: 10889A Fiber-Optic to Logic Converter

¹Refer to Application Note 101. See the Arbiter website at www.arbiter.com, Resources, Documentation.