

## Arbiter Systems, Inc

### Model 10881A Fiber-Optic to Logic Adapter

#### General Description

The Model 10881A fiber-optic to logic adapter allows transmission of a digital signal over several kilometers<sup>1</sup> and upon receiving, for the conversion to a +5 V CMOS logic level output signal. One optical signal is received and simultaneously sent as an electrical signal on two separate, individually-buffered BNC connectors. Figure 1 provides an illustration of the Model 10881A configurations.

The signal logic level is HI whenever the optical signal is ON. Whenever optical data is received the Data LED illuminates (flashes).

#### Specifications

Input: Fiber-optic signal via a 62.5/125  $\mu\text{m}^2$  fiber; -10 to -24 dBm input level  
Connector: one type ST fiber optic connector.  
Output: +5 V CMOS signal  
Connectors: two (2) standard BNC connectors or two (2) pluggable terminal strips  
Impedence: 10 ohms  
Current:  $\pm 75$  mA maximum  
Power Input: +9 to +13.5 Vdc  
Power Supply: 120 Vac, 60 Hz source; 90 to 260 Vac 47 to 63 Hz source; or +72 to +140 Vdc source  
Size: 50 x 38 x 50 mm (2.0 x 1.5 x 2.0 in.), overall height including connectors  
Weight: 94 g (3.30 oz.)  
Temperature: Operating:  $-10^\circ$  to  $+50^\circ$  C  
Nonoperating:  $-40^\circ$  -  $+75^\circ$  C

#### Ordering

120 Vac, 60 Hz power supply:

10881Aopt01: two (2) BNC output connectors

10881Aopt02: two (2) pluggable terminal strip output connectors

+72 to +140 Vdc power supply:

10881Aopt03: two (2) BNC output connectors

10881Aopt04: two (2) pluggable terminal strip output connectors

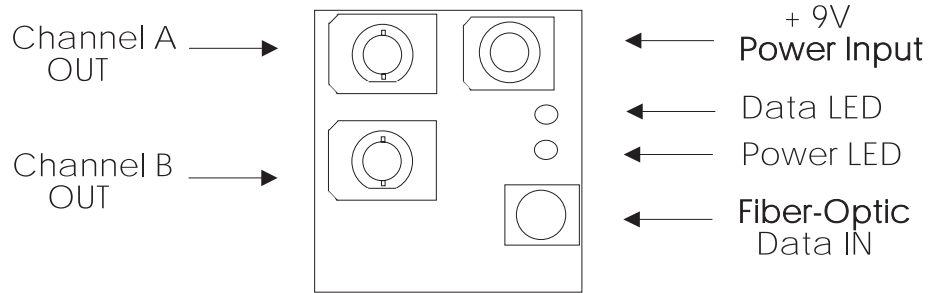
90 to 260 Vac, 47 to 63 Hz power supply:

10881Aopt05: two (2) BNC output connectors

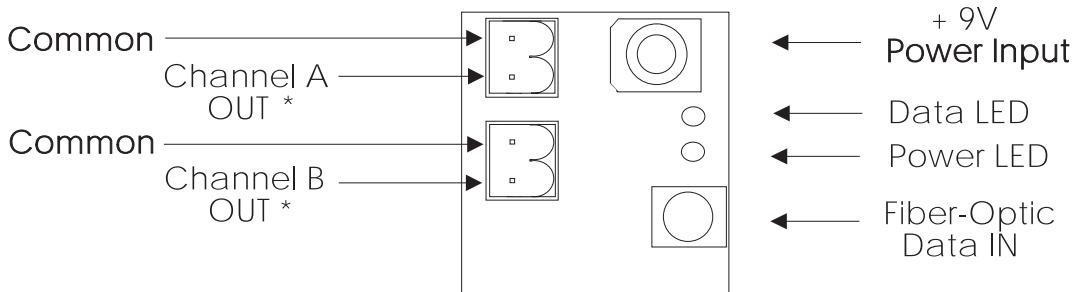
10881Aopt06: two (2) pluggable terminal strip output connectors

PD0020300

10881Aopt01, 10881Aopt03, and 10881Aopt05  
Fiber Optic-to-Logic  
Adapter



10881Aopt02, 10881Aopt04, and 10881Aopt06  
Fiber Optic-to-Logic  
Adapter



\* Note: Mating Connectors included

**Figure 1. Model 10881A Fiber-Optic to Logic Adapter**