

Model 6760 40-Channel TTL Logic-to-POF Fiber Interface Converter

- Converts TTL Logic signals to POF Fiber Optic signals.

INTRODUCTION

The Model 6760 is a 40 – Channel High Speed TTL Digital Logic Level to POF Interface Converter from Electro Standards Laboratories. It translates 20 input/output logic pairs into 20 fiber RX/TX pairs, resulting in a total of 40 fiber optic connections. Typical operating speeds are up to 10 Mbps. The fiber optic connectors are Versatile Link Plastic Optical Fiber (POF) type. They are located on the front panel of the unit. The channels are (RX1 – RX20) and (TX1 – TX20) which correspond to the copper connections on the rear panel. The unit is powered by an included 5Vdc power supply. Power is supplied via a 2-pin Phoenix connector. The power supply input is protected from overvoltage, overcurrent and high power transients. All TTL copper connections feature ESD protection of $\pm 8\text{kV}$ contact discharge, $\pm 15\text{kV}$ air discharge, (IEC61000-4-2). The copper input/output connections are made via the 68-pin VHDCI connector located on the rear of the unit.



Model 6760 / Cat. No. 306760

Connectors:

Copper: (1) 68-Pin female VHDCI Connector
Fiber: (40) Female Versatile Link Plastic Optical Fiber (POF) Connectors; (20) for RX, and (20) for TX

Power:

(1) 2-Pin Phoenix Connector;
(1) 5vdc power supply, Cat. No 531272 included.

Mechanical:

Dimensions: 19.0" x 1.75" x 6.09" (48.3 x 4.5 x 15.5 cm)
Weight: 3.1 lbs (1.4 kg)

SPECIFICATIONS:

Copper Interface:

Type: TTL Logic
Vih range: (1.4 - 2.1)V
Vil range: (0.6 - 1.4)V

Optical Interface:

TX Power: -3.5 dBm
RX Sensitivity: -23 dBm
Wavelength: 650 nm, multimode
Link Distance:

- Up to 50 meters with 1mm Plastic Optical Fiber (POF)
- Up to 500 meters with 200 μm Hard Clad Silica (HCS)

Fiber Polarity:

TTL Logical 0 = Fiber Light OFF
TTL Logical 1 = Fiber Light ON

Data Bit Rate:

Up to 10 Mbps

Operating Environment:

-40°C to +85°C

FEATURES INCLUDE:

ESD protection on all copper interfaces, convenient Versatile Link POF connectors, and TTL logic level test points for signal monitoring. The block diagram is shown below. (Note: Test points are located on the circuit board inside the enclosure.)

