AFL-160

Contact Closure Fiber Optic Link

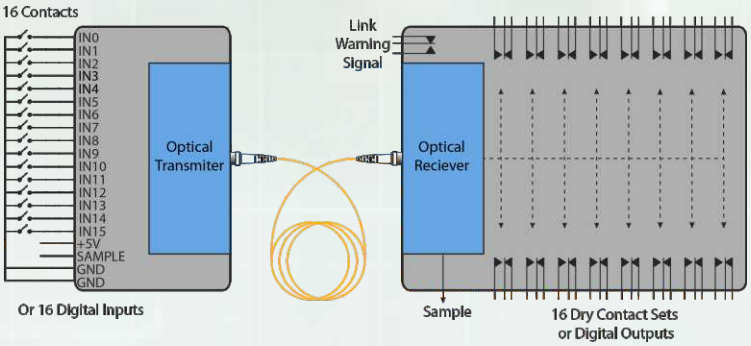


The AFL-160 was primarily designed for industrial and control application. The product is sampling the 16 Digital TTL input at a rate of 93 KHz. simultaneously and transmit all control signals to 16 digital outputs. Those outputs are available as 16 relays or as 16 TTL compatible outputs (0-5V). A "LINK" led and relay contacts enables the user to know if the link was disconnected and take any precautions needed to halt the system. Input sampling and output updates may be synchronized to external circuits or controllers by using the "SAMPLE" pin at the Transmitter or at the Receiver.

A.A. LAB SYSTEMS LTD.

Technical Specifications:

Input Range	0-5V related to TX common ground
Output contacts	Normally open, Common, Normally Closed. Each relay is isolated from the others.
Contacts rating:	30VDC @ 1A,125VAC@0.5A, 60VDC@0.3
Frequency Response (TTL)	DC to 20 KHz
Timing jitter (TTL to TTL)	10.5 microseconds maximum
Supply Voltage	12 V regulated, floating power supply (24VCdc optional)
Transmission Range:	
Single Mode transceivers	30 dB
Multi Mode transceivers	10dB (2.8 Km. Maximum)
5V output terminal current	Up to 100 mA
TTL output On/Off time	50nSec (rise or fall time)
Relay ON/Off time	Hold- 2mSec, Release- 0.9mSec (average)
Voltage Isolation:	
Transmitter to Receiver isolation	infinite voltage isolation
Input/Output to Mains	800V standard, up to 2500 V optional
Output to Output	Over 800 Volts @ contact closure version
Battery operated	Infinite voltage
Relay to Relay isolation voltage	800V maximum
Optical Fiber Interface:	Multi-Mode (up to 2.8 Km) Single Mode (Up to 50-80 Km) ST connector standard, SMA Optional



The link is connected between the TTL inputs at the transmitter , and the Relay contact outputs (Or TTL outputs) at the receiver.

Features:
- Excellent signal isolation
- Prevents ground loops and computer spikes
- Transfers digital control signals to distances of up to 1.6 Km (50Km with Single Mode transceivers)
- Input signal: 0-5V @ DC-20 KHz.
- 2 Versions available: TTL outputs or Contact Closures
- Very small size: TX: 75 x 60 x 23mm, RX: 115 x 90 x 23mm (box only)
- Both, the receiver and the transmitter are ready for wall mounting.
- Low cost
- Relay ON/Off time: Hold- 2mSec, Release- 0.9mSec (average)
- TTL output On/Off time: 50nSec (rise or fall time)
- TTL output update rate: 93 KHz.

Ordering Information:
The AFL-160 may be ordered with Single-Mode or Multi-Mode receivers and transmitters.
Each side needs a separate power supply or battery. All units, on the same side, which share the same common ground, may use the same

EXAMPLE:
TRANSMITTER / RECEIVER PAIR:
AFL-160 - TT - REL - MM - R

- TT = TTL Inputs
- MM= Multi-Mode Transceivers. SM = Single Mode Transceivers
- Range in meter
- REL = Relay Outputs
- TT = TTL Outputs

<u>POWER SUPPLIES:</u>
AFL-80 - 03 - 3 channel power supply (for one side - Rx or Tx or mixed)
AFL-80-10 - Power supply for powering up to 10 units (for one side)
AFL-80-BAT - Battery operated power supply - Please consult factory.
Optional DIN rail holders.
Optional operation from 24Vdc power supplies.
Optical fibers are available. Standard lengths are: 2,10,20,50,100m

A.A. LAB SYSTEMS LTD.
Head office: 33 Hayetzira st. Ramat-Gan 52521, ISRAEL,Tel:972-3-5756327/8 Fax:972-3-5756326
U.S.A office: 9 Blossom Drive, Kennett Square, PA19348, Tel:(302)478-2881 Fax:(610)444-5544