

# AFL-220

DIN rail Analog/Contact Closure Fiber Optic Link  
With 4-20 mA interface



AFL-220  
TX

AFL-220  
RX

AFL-220 DIN rail Analog/Contact Closure Fiber Optic Link was designed especially for industrial applications. The units may be used for transferring +/-10V analog signals or 4-20mA current loop signals, along with 2 contact closures (or digital TTL signals). The user may configure the Analog input to be -10V to +10V or 4-20 mA by using a single jumper. The receiver will output both -4-20 mA signal (for input range of 0 to +10V or 4-20mA, as selected) along with 4-20 mA current loop signal.

The 2 Digital I/O lines may be also configured by the user to 0 to +5V (or +3.3V) Standard TTL signal or to contact closure (i.e. a contact close at the transmitter would cause a contact closure at the receiver). The Receiver contacts are change-over type so the operation may be inverted (contact closure at the input may be configured to closed or open switch at the receiver).

The AFL-220 Analog/Contact Closure Fiber Optic Link was designed for system integrators and builders, where low size, low power consumption and low cost are important. The bandwidth of the analog input is DC-5KHz.

The distance between the 2 modules may be between 0 to 3Km with the standard Multi-Mode interface (30 miles optional with Single Mode optical interface and SM fiber).

Technical Specifications:

Analog Input Range	+/-10Vor4-20mA
Output Voltage Range	+/-10Vor4-20mA
Non-Linearity Error	0.05%@+/-10V range
Noise	Better than 1mVRMS
Input Impedance	100KOhms
Analog Bandwidth	DC-5KHz.
Digital Bandwidth	DC-30Kbps
Digital Bandwidth	72dB
Supply Voltage	9V-14Vor16V-28V DC
Supply Current	RX:120-180mA,TX:90-150mA

Features:

- Excellent signal isolation.
- Prevents ground loops and computer noise effects on your Analog Signals.
- Transfers analog signals to distances of up to 3Km (50Km. Optional).
- Linearity: better than +/-0.05%.
- Low noise; S/N ratio: 72 dB.
- Input signal: Up to ±10 Volt @ DC-5 KHz or 4-20mA @ DC-5KHz.
- 2 Contact Closure signals with 125VAC@0.5A or 24VDC@1A rating.
- Input power may be selected by user: 9-14VDC or 16-28VDC.
- Low Offset Temperature Drift: Better than 50 ppm/deg.C
- Very small size: 22.5 mm width
- Low cost
- Differential input Option with 1 or 10 or 100 gain for low level signals and better noise immunity.
- Overflow and Underflow Alarm LEDs + Open Collector signals at the transmitter
- Out of Range and No Link alarm LEDs + Open Collector signals at the receiver.
- Optical budget with Single Mode transceivers: 30 dB

