

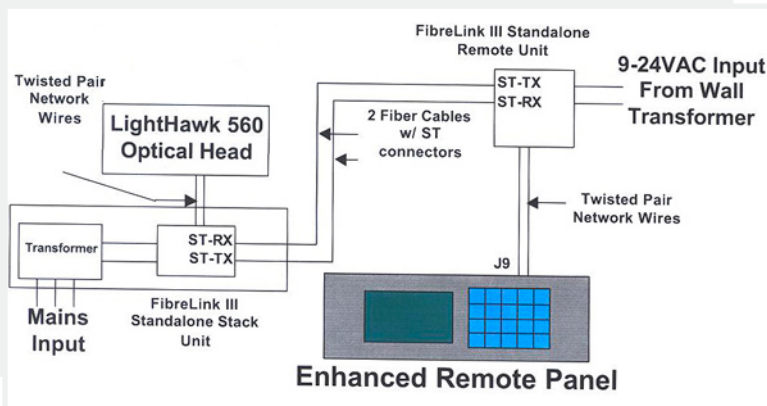


TELEDYNE INSTRUMENTS
Monitor Labs
A Teledyne Technologies Company

FibreLink III



- **Designed for use with the LightHawk 560 and the Ultraflow 150**
- **Protects Ground and Stack Equipment**
- **Quick, Trouble Free Installation**



The FibreLink III Standalone Version fiber optics interface reduces lightning strike damage to stack-mounted equipment. As a repeater device it is designed to create an electronically isolated fiber optic bridge between two FTT10A LONWORKS[®] twisted pair networks.

All network packets are passed between both ends of the network making the FibreLink III ideally suited for use with the LightHawk[®] 560 and the UltraFlow 150.

The FibreLink III stack unit is enclosed in a NEMA4X housing designed for use in outdoor applications. The Control room unit is packaged in an extruded aluminum case and is intended for indoor environments such as control rooms and temperature controlled Continuous Emission Monitoring System (CEMS) shelters. Both units contain an identical interchangeable circuit board that converts FTT10A twisted pair network signals into fiber optic signals running at approximately 78K BAUD. The Stack Unit contains a transformer to reduce power mains voltage to approximately 24VAC for use by the internal circuit board.

The FibreLink III is ideal for today's demanding applications, demonstrating state-of-the-art technology designed to provide versatility, ease of use and functionality coupled with high performance and durability.



FibreLink III

SPECIFICATIONS

PHYSICAL DIMENSIONS

Stack Unit: 5-3/8”(137mm)(L) X 11-1/2”(292mm)(W) X 13-1/2”(343mm)(H)
 Control Rm Unit: 1-7/8”(47.6mm)(L) X 6-1/4”(82.6mm)(W) X 5-1/8”(130mm)(H)

PHYSICAL WEIGHTS

Stack Unit: 8.9 lbs. (4.04 kg)
 Control Room Unit : 1.2 lbs. (0.544 kg)

OPTICAL CHARACTERISTICS

Nominal Wavelength: 850 nm
 Fiber Optic Connectors: ST Style
 Number of Fibers Required for Operation: 2
 Cable Type: 62.5/125 micron, Multimode
 Maximum Fiber Optic Cable Length: 6,561.7 feet (2 km)
 (Assuming attenuation of 3.75 db/km from cable, 0.5 dB each for two ST connectors per fiber and 3dB of margin.)

POWER REQUIREMENTS

Stack Unit: 98 to 132 VAC, 47-63Hz, Single Phase, 1.5 VA Maximum
 Fuses: 0.5 Amp, 250V, SLO-BLO
 Control Room Unit: 9 to 24 VAC, 47-63Hz, Single Phase, 1.5 VA Maximum
 -01 provided with Wall Mount Transformer for 98 to 132 VAC, 47-63Hz, Single Phase power
 -02 provided with Wall Mount Transformer for 196 to 264 VAC, 47-63Hz, Single Phase power

WIRING REQUIREMENTS

Network Transceiver Type: Free Topology Transceiver (FTT10A)
 Cable Type: 2 conductor unshielded twisted pair, 16 AWG (Belden 85102, Belden 8471 or equivalents). If shielded cable is used, see Note 2.
 Termination Style: Jumper Selectable Single / Double Termination (Internal)

Maximum Wire Length Between Optical Head & FibreLink III: 820 feet (0.25 km) [must be Double Terminated]. SEE NOTE 1
 Maximum Wire Length Between Enhanced Remote Panel & FibreLink III: 820 feet (0.25 km) [must be Double Terminated]. SEE NOTE 1.

AMBIENT OPERATING CONDITIONS

Stack Unit : Temperature Range:-40 to +150°F (-40 to +65.6°C)
 Relative Humidity Range: 5% to 100% condensing
 Enclosure Rating: NEMA4X
 Control Room Unit : Temperature Range:-40 to +150°F (-40 to +65.6°C)
 Relative Humidity Range: 5% to 95% noncondensing
 Enclosure Rating: NEMA1

NOTES

1. Since the most frequent application of the FibreLink is as a means to reduce lightning strike damage to stack-mounted equipment, short distances of wire cable are highly encouraged. Long lengths of wire will reduce the effectiveness of the equipment for this purpose.
2. Shielded cable drain wires must be terminated as per installation drawing guidelines using shield termination kit, TML Part Number 0650-0400-01.
3. FibreLink III units function as repeaters, i.e., all network traffic is passed through in both directions.
4. The FibreLink III Standalone unit is designed for use with the 550 Opacity Monitor, the LightHawk 560 and the Ultraflow 150.

