



28517 - FIBER OPTICS ANALOG LINK is designed to learn basic fiber optics including fiber end preparation. Students can also study the construction of transmitter & receiver to form analog link. Ample number of experiments can be performed with this kit by referring to the exhaustive manuals provided with the kit.

OBJECT:-

- 01 Setting up Fiber Optic Analog Link
- 02 Study of Intensity Modulation Technique using Analog Input Signal
- 03 Measuring Losses in the fiber
 - 3.1 Measurement of propagation loss in the Fiber
 - 3.2 Measurement of connector loss
- 04 Fiber Bending Loss
- 05 Measurement of Numerical Aperture of Optical Fiber

TECHNICAL SPECIFICATIONS

- 01 TRANSMITTER : One number Fiber Optic LED having peak wavelength of emission 635 nm
- 02 RECEIVER : One number. Fiber Optic Photodetector
- 03 DRIVER : Analog
- 04 CABLE TYPE : Step indexed multimode PMMA plastic cable

- 05 CONNECTOR TYPE : SMA
- 06 ANALOG BANDWIDTH : 35KHz.
- 07 DIGITAL BANDWIDTH : 50KHz.
- 08 FIBER DIAMETER : 1000 microns
- 09 CLAD REFRACTIVE INDEX : 1.406
- 10 CORE REFRACTIVE INDEX : 1.492
- 11 NUMERICAL APERTURE : Better than 0.5
- 12 POWER SUPPLY : $\pm 12\text{ V}$ at 100mA
- 13 SINE WAVE GENERATOR : 1KHz, 6V pp
- 14 SIGNAL STRENGTH INDICATOR: 8 LED
- 15 FIBER LENGTHS : 1 & 5 Meter.
- 16 TEST POINT : 4 Nos.
- 17 WEIGHT : 1 Kg. (Approx.)
- 18 DIMENSION : W340 x H125 x D210.

LIST OF ACCESSORIES:

- 01 Patch Cords 2mm to 2mm, Length 50cm Red : 02
- 02 Fiber Optical Cable 1 Meter : 01
- 03 Fiber Optical 5 Meter : 01
- 04 N.A. Jig & N.A. Scale : 01
- 05 Mains lead : 01
- 06 Mandrel : 04
- 07 Metallic Connection Sleeves (Splicing Unit) : 01

OTHER APPARATUS REQUIRED:

- 01 Cathode Ray Oscilloscope 20MHz
- 02 Digital Fiber Optic Power Meter

Note: Specifications are subject to change.

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