



**OMEGA TYPE FO-009 FIBER OPTICS DIGITAL LINK** is designed to learn basic fiber optics including fiber end preparation. Students can also study the construction of transmitter & receiver to form digital 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 Digital Link
- 02 Study of Intensity Modulation Technique using Digital Input Signal
- 03 Characteristics of E-O Converter
- 04 Measurement of Numerical Aperture

**TECHNICAL SPECIFICATIONS**

- 01 TRANSMITTER : One number Fiber Optic LED having peak wavelength of emission 660 nm
- 02 RECEIVER : One number. Fiber Optic Photodetector
- 03 DRIVER : Digital
- 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:
- 10 CORE REFRACTIVE INDEX: 1.492
- 11 NUMERICAL APERTURE : Better than 0.5
- 12 POWER SUPPLY : +5V & +9V at 100mA
- 13 VARIABLY POWER SUPPLY: 0-20V at 20mA
- 14 SQUARE WAVE GENERATOR : 1KHz, 2V pp
- 15 FIBER LENGTHS : 1 Meter.
- 16 TEST POINT : 4 Nos
- 17 Weight : 1.5 Kg. (Approx)
- 18 Dimension : W340xH125xD210

**LIST OF ACCESSORIES:**

- 01 Patch Cords 2mm to 2mm, Length 50cm Red : 02
- 02 Fiber Optical Cable 1 Meter : 01
- 03 N.A. Jig & N.A. Scale : 01
- 04 Experimental Manual, Mains lead : 01

**OTHER APPARATUS REQUIRED:**

- 01 Cathode Ray Oscilloscope 10MHz Omega Type CRO-10
- 02 Digital Fiber Optic Power Meter Omega Type DFPM-021

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

**OMEGA ELECTRONICS**