

**FIBRE-OPTIC TRAINER FOR NUMERICAL
APERATURE AND FIBRE LOSS
MEASUREMENT**
OMEGA TYPE FO-005



OMEGA TYPE FO-005 Fibre-Optic Trainer for Numerical Aperture and Fibre Loss Measurement has been designed specifically for the study of Numerical Aperture and Fibre Loss Measurement. Practical experience on this Trainer carries great educative value for Science & Engineering Students.

OBJECT

Study of:

- 01 Fibre Optic Transmitter and Receiver.
- 02 Numerical Aperture of PMMA Fibre.
- 03 Loss in 1 Mtr / 5 Mtr. PMMA Patch Chords.
- 04 Electrical - Optical Converter Characteristics.
- 05 Optical to Electrical Converter Characteristics.
- 06 Intensity Modulation System.

FEATURES

The trainer consists of the following built-in parts:

- 01 IC regulated D.C. power supply.
- 02 Fibre-Optic Analogue Transmitter @ 660nm
- 03 Fibre-Optic Analogue Transmitter @ 850nm
- 04 Fibre-Optic Receiver.
- 05 One-metre PMMA Fibre patch cord.
- 06 Five-metre PMMA Fibre patch cord.
- 07 In-line SMA adaptor.
- 08 Two potentiometer to vary forward current of LED in Transmitter & current of phototransistor in receiver.
- 09 SPDT switch for selecting wavelengths 660nm and 850nm.
- 10 NA JIG with scale marked on it to measure length.

- 11 Mandrel.
- 12 NA measuring Scale to measure width of Fibre Optic's LED.
- 13 Adequate no of other electronic components.
- 14 Mains ON/OFF switch, Fuse and Jewel light.
- 15 The unit is operative on 230V $\pm 10\%$ at 50Hz A.C. Mains.
- 16 Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.
- 17 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.
- 18 Weight : 2 Kg. (Approx)
- 19 Dimension : W 340 x H 125 x D 210

LIST OF ACCESSORIES:

- 01 Patch cords 4mm length 50cm Red.....02
- 02 Patch cords 4mm length 50cm Black.....02

OTHER APPARATUS REQUIRED :

- 01 AF/RF Generator 10Hz to 1MHz OMEGA TYPE AO-309.
- 02 Digital Fibre-Optic Power meter omega Type DFPM-021.
- 03 Digital Multimeter OMEGA TYPE DMM-201.
- 04 Cathode Ray Oscilloscope 20MHz OMEGA TYPE CRO-20.

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

OMEGA ELECTRONICS