

ADVANCED FIBER OPTICS TRAINER

MODEL - FOT200

This trainer has been designed with a view to provide practical and experimental knowledge of advance elementary fiber optics on SINGLE PCB.



SPECIFICATIONS

- 1 Transmitter: 2 No. Fiber optic LED's (Peak Wavelength of emission 660mm)
- 2 Receiver: 2 No. Fiber optic Photo Detectors
- 3 Modulation Technique : a. Direct Amplitude Modulation & Demodulation
 - b. Frequency Modulation & Demodulation
 - c. Pulse width Modulation & Demodulation
- 4. Full duplex analog and Digital transmitter & receiver.
- 5. Single module covering large nos. of experiments including experiments with optical power meter.

660nm & 950nm channels with Transmitter and Receiver

- 6 Drivers : Analog & Digital for both channels
 - Analog Bandwidth- Digital Bandwidth: 350 KHz: 2.5 MHz
- 7 Function Generator : a. 1 KHz Sine Wave (Amplitude adjustable)
 - b. 1 KHz Square Wave (TTL)
- 8. Crystal controller clock.
- 9. Function blocks indicated on board mimic.
- 10. Fiber optic Cable : a. Connector Type Standard SMA.
 - b. Sub miniature assembly duly polished fiber at both ends for max. Transmission & perfect round spot for numerical aperture

Dealer:-

measurement

11. Core refractive index : 1.49212. Clad refractive index : 1.406

13. Power Supply : 230V +/-10%, 50 Hz

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

Sigma Trainers and Kits

E-113, Jai Ambe Nagar, Near Udgam School,

Thaltej,

AHMEDABAD - 380054.

INDIA.

Phone(0): +91-79-26852427/ 26850829

Phone(F): +91-79-26767512/ 26767648 Fax : +91-79-26840290/ 26840290

Mobile : +91-9824001168

Email: sales@sigmatrainers.com

: sigmatrainers@sify.com

Web: www.sigmatrainers.com

EXPERIMENTS

- 1. To transmit and receive analog signal using fiber optic cable.
- 2. To transmit and receive digital signal using fiber optic cable.
- 3. To transmit and receive Frequency modulated signal using fiber optic cable.
- 4. To transmit and receive Pulse width modulated signal using fiber optic cable.
- 5. To transmit and receive voice signal using fiber optic cable. Setting up Fiber optics Analog Link
- 6. Study or propagation loss in optical fiber
- 7. Study of bending loss
- 8. Measurement of Numerical aperture
- 9. Characteristic of Fiber optic Communication Link
- 10. Measurement of propagation loss in optical Fiber Power Meter
- 11. Setting of Fiber Optic Voice link using AM
- 12. Setting of Fiber Optic Voice link using FM
- 13. Setting of Fiber Optic Voice link using PWM
- 14. Setting of fiber optics voice link using PWM
- 15. PC-PC Communication using 2 channel Rs232