Phone: +91-9896600003
Email : sales@naugralabequipments.com

Product Name :	**Product Code :**
Advance Fiber Optic Trainer	NLAB-ELECTRONICSAB240003

Description :

Advance Fiber Optic Trainer

Technical Specification :

Single board Fiber Optic Trainer Kit to study the characteristics of Fiber using Digital and Analog techniques. This kit also facilitates with digital and analog Modulation & Demodulation communication techniques.

FEATURES:

660nm and 850/950nm Transmitter.

Two Nos. Of Photo Detector.

On-board Sine & Square wave generator.

On-board Manchester Coding/ Decoding Technique.

On-board Noise Generator & PRBS Generator

On-board Bit Error Rate Measurement.

On-board PC to PC Communication.

On-board 4th Order Low Pass Filer.

On-boad Fault Switch.

In-Built Power Supply.

SPECIFICATIONS:

Transmitter - One Fiber Optics LED having peak wavelength of emission 660 nm. One Fiber Optics LED having

peak wavelength of emission 850/950 nm

Receiver - Two Fiber Optic photo detector.

Modulation Techniques - Digital communication with Pulse Code Modulation (PCM) using Motorola MC

M a n c h e s t e r C o d i n g / Decoding Technique

White Noise Source output type Noise Generator

Amplitude of 0 to 5Vpp

16 Bit switch selectable PRBS generator

Clock of 32, 64, 128 KHz.

Bit error rate measurement of 8 bit counter with LED indication upto 255 count.

Time Division Multiplexing, 16 Channels (64 Kbits/Sec).

Two Frame Marker of 8 bit user selectable markers in alternate frames.

Data Rate of 1.024 MBits/Sec.

2 channels Voice PCM with Telephone Hand sets (A Law).

Analog Input of 1Vp-p.

Analog Bandwidth of 3.75KHz

FWHM Spectral Width of 100nm.

l Drivers : Analog & Digital

l AC Amplifiers : 1 Nos.

l PLL Detector : 1 No.

Filters : 1 No 4th order Butterworth 3.4 KHz cut-off freq.

Analog Band Width : 350 KHz.

Digital Band Width : 2.5 KHz.

Functional Generator : 1Hz. To 100 KHz sine wave (amplitude adjustable) 1Hz. To 100 KHz square wave (TTL)

CODEC Link : Two Telephone Hand set provided

Serial PC to PC link : 9 Pin D-type RS232C TX and Rx link (Max. 115.2 Kbps Baud)

Switched Faults: 8 Switch Faults are provided to study different effects on circuit.

Fiber Optics Cable: Connector type Standard SMA (Sub miniature assembly). Duly polished fiber at both end for Numerical Aperture Measurement.

Cable Type :Step indexed multimode PMMA plastic cable

Core Refractive Index : 1.492.

Clad Refractive Index : 1.406

Numerical aperture : Better than 0.5.

Acceptance Angle : Better than 60o

Fiber Diameter : 1000 microns.

Outer Diameter : 2.2mm.

Fiber Length : 5m & 1m.

Power Supply : Built in DC power supply, 230V + 10%, 50 Hz.

Accessories Included : Manuals, set of patch cords.

Interconnections : 2 mm Banana Sockets.

Naugralabequipments

Website: www.naugralabequipments.com, **Email:** sales@naugralabequipments.com

Address: 6148/6, Guru Nanak Marg,Ambala Cantt,Haryana,India. **Phone:** +91-9896600003