Order Code - 28527
Advance Fiber Optic Trainer

Order Code- 28527 is a 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 145502 CODEC Chip.

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- Manchester Coding / 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.

- Drivers : Analog & Digital
- AC Amplifiers : 1 Nos.
- 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 60^{o}
- 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.

Note: Specifications are subject to change.

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