



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 Filter.
- On-board Fault Switch.
- In-Built Power Supply.

SPECIFICATIONS:

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| ● Transmitter | : One Fiber Optics LED having peak wavelength of emission 660 nm. One Fiber Optics LED having peak wavelength of emission 850/950 nm. | ● Filters | : 1 No 4th order Butterworth 3.4 KHz cut-off freq. |
| ● Receiver | : Two Fiber Optic photo detector. | ● Analog Band Width | : 350 KHz. |
| ● Modulation Techniques | : Digital communication with Pulse Code Modulation (PCM) using Motorola MC 145502 CODEC Chip. | ● Digital Band Width | : 2.5 KHz. |
| | | ● Functional Generator | : 1Hz. To 100 KHz sine wave (amplitude adjustable)
1Hz. To 100 KHz square wave (TTL) |
| - Manchester Coding/ Decoding Technique. | | ● CODEC Link | : Two Telephone Hand set provided |
| - White Noise Source output type Noise Generator | | ● Serial PC to PC link | : 9 Pin D-type RS232C TX and Rx link (Max. 115.2 Kbps Baud) |
| - Amplitude of 0 to 5Vpp. | | ● Switched Faults | : 8 Switch Faults are provided to study different effects on circuit. |
| - 16 Bit switch selectable PRBS generator | | ● Fiber Optics Cable | : Connector type Standard SMA (Sub miniature assembly). Duly polished fiber at both end for Numerical Aperture Measurement. |
| - Clock of 32, 64, 128 KHz. | | ● Cable Type | : Step indexed multimode PMMA plastic cable. |
| - Bit error rate measurement of 8 bit counter with LED indication upto 255 count. | | ● Core Refractive Index | : 1.492. |
| - Time Division Multiplexing, 16 Channels (64 Kbits/Sec). | | ● Clad Refractive Index | : 1.406. |
| - Two Frame Marker of 8 bit user selectable markers in alternate frames. | | ● Numerical aperture | : Better than 0.5. |
| - Data Rate of 1.024 Mbits/Sec. | | ● Acceptance Angle | : Better than 60° |
| - 2 channels Voice PCM with Telephone Hand sets (A Law). | | ● Fiber Diameter | : 1000 microns. |
| - Analog Input of 1Vp-p. | | ● Outer Diameter | : 2.2mm. |
| - Analog Bandwidth of 3.75KHz. | | ● Fiber Length | : 5m & 1m. |
| - FWHM Spectral Width of 100nm. | | ● Power Supply | : Built in DC power supply, 230V + 10%, 50 Hz. |
| ● Drivers | : Analog & Digital | ● Accessories Included | : Manuals, set of patch cords. |
| ● AC Amplifiers | : 1 Nos. | ● Interconnections | : 2 mm Banana Sockets. |
| ● PLL Detector | : 1 No. | | |

Note: Specifications are subject to change.

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