

Order Code -28526 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.

### SPECIFICATIONS:

- Two Transmitter Fiber Optics LED having peak wavelength of emission 660nm & 950nm.
- Two Receiver Fiber Optic photo detector.
- Modulation & Demodulation Techniques using Direct AM, FM, PPM, PWM.
- On-board Analog & Digital Drivers.
- On-board AC Amplifiers.
- On-board PLL Detector
- Analog Band Width 350 KHz.
- Digital Band Width 2.5 KHz.
- 4th order Butter worth 3.4KHz Low Pass Filter.
- On-board 1Hz. To 10 KHz sine wave (amplitude adjustable), Square wave (TTL)
- FO voice link using microphone & speaker
- RS-232C PC to PC Serial link using 9 Pin D -type.
- Four Switched Faults for transmitter & receiver.
- Fiber Optics Cable Connector type Standard SMA.
- Duly polished fiber at both end for Numerical Aperture Measurement.
- 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°
- Fiber Diameter 1000 microns.
- Outer Diameter 2.2mm.
- Fiber Length 5m & 1m.
- In-Built Power Supply +5V/1.5A, ±12V/250mA.
- Interconnections 2 mm Banana Sockets
- User's Manual with set of Patch Chords.
- 230mm x 140mm x 80mm (L x W x H)



### FEATURES:

- 660nm and 950nm Transmitter.
- Two Nos. Of Photo Detector.
- On-board Sine & Square wave generator.
- On-board FM Modulation & Demodulation
- On-board PWM Modulation & demodulation.
- On-board PPM Modulation & Demodulation.
- On-board 4th Order Low Pass Filter.
- On-board Fault Switch.
- In-Built Power Supply.

### OBJECT:

- Setting up Fiber Optic Analog Link
- Setting up Fiber Optic Digital Link
- Study of Intensity Modulation Technique using Analog Input Signal
- Study of Intensity Modulation Technique using Digital Input Signal
- Setting up of Propagation Loss in Fiber Optic
- Study of Bending Loss.
- Measurement of Optical Power using Optical Power Meter
- Measurement of Propagation loss using Optical Power Meter
- Measurement of Numerical Aperture
- Characteristics of F-O Converter using OPM
- Characteristics of Fiber Optic communication Link
- Setting up of Fiber Voice Link using Intensity Mode
- Study of Frequency Modulation and Demodulation
- Study of Pulse Width Modulation and Demodulation
- Study of Pulse Position Modulation and Demodulation
- Study of PC to PC Communication using Fiber Optics Digital Link

Note: Specifications are subject to change.

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