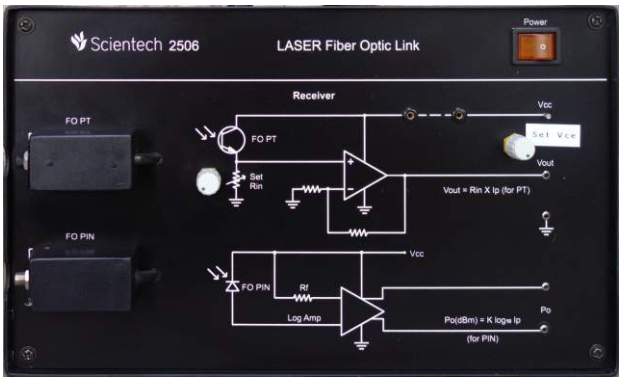
Laser Fiber Optic Platform

Scientech 2506



Scientech 2506 LASER Fiber Optic Platform model has been designed to conduct studies on LASER diodes, optical fibers and optical communication methods, by transmission either through an optical cable or free space. The experiments introduce the student to the concepts underlying LASER technology in simple way. The platform includes accessories to conduct experiments, however instrument like DMM are needed extra. Seven experiments based on the Scientech 2506 have been included in the manual with full details. The students can design a number of other experiments and do small projects based on the platform.

Features

- 660 nm Laser diode source with external signal modulation facility
- Selectable Automatic Power control/ Automatic Current control mode
- SMA connector for coupling optical power in to fiber
- Optical intensity/ Carrier level control facility
- Laser diode current and monitor photo detector current monitoring facility
- Free space communication facility through a line-of-sight path
- On-board Photo detector.
- Facility to measure power using volts to dBm conversion.

Technical Specifications

Transmission Module :

Type	:	Laser 660 nm
Operating Mode	:	ACC & APC

Receiver Module :

Demodulator	:	Photo transistor
Power Measurement	:	PIN Diode
Power Supply	:	6 V DC Adapter (plug to 230 V Mains)

Included Accessories :

• Transmitter	:	1 no.
• Receiver	:	1 no.
• Fiber optic cable (Plastic)	:	1 no.
• Fiber optic cable (Glass)	:	1 no.
• Mains cords	:	2 nos.
• NA measuring Jig	:	1 no.
• NA Measurement scale	:	1 no.
• Mandrel	:	1 no.

Scope of Learning

- Study of V-I & P-I Characteristics of LASER Diode
- Study of ACC and APC modes of operation
- Study of Intensity modulation and demodulation
- Study of Propagation delay and various types of Losses
- Determination of Numerical Aperture of Optical fiber
- Study of free space communication system

Subject to Change

Designed and Manufactured in India by -

Scientech Technologies Pvt. Ltd.

94, Electronic Complex, Pardesipura, Indore-452010, India.

© +91-731-4211100, ✉ info@scientech.bz, www.ScientechWorld.com, Helpline : +91 9893270301