

Product Name :
Fibre Optical communications trainer

Product Code :
FOOPC10



Description :

Fibre Optical communications trainer - Features:

This trainer should be used to teach a students about the basic theory of fiber-optic communication and explore the capabilities of many fiber-optic circuits, used in digital data transmission and analog transmission. Students will be able to set up the cabling requirement, for making a fiber optic communication circuit using standard fiber-optic cabling tools. The students then carry on to set-up a system to do basic analog and digital data transmission over fiber optic media.

The components and devices used in the trainer are mounted onto Plexiglas panels, so that the hardware can be easily inserted into the training frames. The systems modular approach, allows many types of configurations and set-ups to be quickly constructed providing the students with a wide variety of practical exercises.

Learning Objective

1. Fundamentals of Fiber Optics Communication

Training coverage:

- Fiber Characteristics
- Optoelectronics in Fiber technology : receiver & transmitter

- Fiber Media types: Single-mode (ST), Multi-mode (SC)
- Fiber Cable Transmission: Attenuation and Loss
- Understanding Digital and Analog signal transmission over Fiber Optics cable: a. Data coder and decoder, b. Multiplexing and De-multiplexing, c. Modulation and Demodulation
- Fundamentals of Fiber Optic Transmitters Design
- Fundamentals of Fiber Optic Receiver Design

2. Fiber Optics Installation and Repair

Training coverage:

- Splices, Connectors and Terminations
- Fiber Optic cable preparation: Cutting and Polishing
- Connecting Fiber Optic cable
- Attenuation in Fiber Optics cable

Specification:

1. Base Station & Fundamentals Module.

Items supplied with the trainer module:

- Photo Emitter & Photo resistor
- Fiber optic optoelectronic
- Analog Signal transmission
- Multiplexer and Demultiplexer
- Data coder and decoder
- Transmitter and receiver

2. Fiber Optics Installation and Repair.

Items supplied with the trainer module:

- Fiber optics installation tools which consist of: Fiber Optic Stripper, cleaver, kevlar scissors and Crimping tool.
- Fiber Optics cables and connectors: FO Cable Single Mode 25 meters, FO Cable Multi-mode 25 meters, MT-RJ Connector 25 Pairs with 1 Pc Blank Coupler, ST Connectors 25 Pairs, SC Connectors 25 Pairs

3. Fiber Optics Applications

Items supplied with the trainer modules:

- Serial Communication between PCs over Fiber Optic media. Module
- Analog Communication over Fiber Optic media module

4. Bench top Base Frame 2 level

5. Accessories: Power Cord & Experiment Manual

Experimental manual to be provided during bidding process.

Technical Specification :

Fibre Optical communications trainer

Naugra Export

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

Address: 6148/6, Guru Nanak Marg, Ambala Cantt, Haryana, India, **Phone:** +91-0171-2643080, 2601773