

FIBER OPTICS COMMUNICATIONS & NETWORKING MODULE

The Fiber Optic Communications & Networking Module is Industrial Fiber Optic technology module. It's a 10-activity, intermediate-level product developed for teaching the very latest in state-of-the-art fiber optic communications and networking technology. The curriculum addresses the most recent advances in the rapidly changing fiber communications and networking technology fields. Curriculum subjects include:

- Fundamentals of fiber optic technology
- Optical fiber manufacture
- Optical fiber construction: single and multimode
- Dispersion and attenuation
- Fiber cable comparisons
- Generation III fiber connection technology
- Fusion splicing techniques
- Fiber couplers and optic tools, testing and test equipment

The module curriculum guide is a comprehensive manual comprising 10 exciting activities, with technical reading assignments for each. Accompanying Fiber Optic Reference Guides contain 14 chapters with several hundred illustrations in 199 pages. An extensive list of references and a working glossary of fiber optic terms are included. Each activity features:

- Real-world applications
- Hands-on working experience and experiments with fiber optics and associated components
- Problem solving and student worksheets
- Homework assignments and investigative research
- Web fiber optic tours and projects

Hands-on experiments and networking activities include:

- Color picture and sound signals over fiber
- Optical fiber characterization
- Losses in optical fiber
- Fiber optic switching networks
- Optical and electrical multiplexing
- Fiber termination polishing and splicing
- Infrared light conversion
- Use of fiber couplers

FEATURES

- 10 comprehensive and challenging activities
- Completely self-contained curriculum
- Curriculum pretest and post test
- Instructor's manual with color-coded answer sheets
- Solid-state, low profile, surface-mount transceivers with audio and video transmission capabilities
- Low voltage transceiver operation with optical detection
- Multiplexed switching input/output transceiver
- Low power LED technology for safely
- 3 wavelength operation

(The Communications and Networking Module shown above comes complete with three fiber optic wide bandwidth analog/digital transceivers, 110 VAC to 12 VDC power adapters, assorted pre-connectorized plastic and glass fibers, 252 meter 1000 μm core plastic fibers, 25 fiber splices, 50 fiber optic retention clips, 50 ST fiber connectors, crimping tool for splices and connectors, 40 μm and 3 mm polishing film, optical inspection scope, index-matching gel, DC motor, fiber optic switch, two optical multiplexers, fiber cutter, polishing plate,



polishing liquid, fiber optic test set, dynamic microphone, AM/FM radio, scale, infrared indicator card, coax cable, photonics and electromagnetic wall charts, two Fiber Optic Reference Guides, two permanently bound student manuals and an instructor's manual in a sturdy 3-ring binder with answer sheets.)

FIBER OPTIC COMMUNICATIONS &

NETWORK MODULE	IF-527
STUDENT MANUAL FOR IF-527	IF-120265
TEACHER'S MANUAL FOR IF-527	IF-120260

25.2-meter 1000 μm core plastic fibers, 25 fiber splices, 50 fiber optic retention clips, 50 ST fiber connectors, 40 μm and 3 mm polishing film

CONSUMABLES KIT	IF-528
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