

## LEOK-21 Optical Fiber Information and Communication Experiment Kit - Complete Model

- 10 fundamental experiments
- Flexible solution for different levels of students
- Hands-on skill training
- Innovative design with quality components



Optical fiber has increased signal transmission bandwidth over longer distance. As the importance of fiber rises, numerous colleges and universities worldwide introduce more courses in optoelectronics and optical communications. This kit is designed to meet the increasing demand for learning and training of fiber optic fundamentals and related practical skills. This Fiber Optic Experimental kit is a sister kit to LEOK-20, and is revised and rewritten to include new experiments such as to measure the parameters of optical fiber beam splitter, attenuator and isolator.



Interference pattern on ground glass screen

## Experimental Contents

- 1) Fundamental knowledge of optical fiber optics
- 2) Coupling method between optical fiber and light source
- 3) Multimode fiber numerical aperture (NA) measurement
- 4) Optical fiber transmission loss property and measurement
- 5) M-Z optical fiber interference
- 6) Optical fiber thermal-sensing principle
- 7) Optical fiber pressure-sensing principle
- 8) Optical fiber beam splitter parameter measurement
- 9) Variable optical attenuator and parameter measurement
- 10) Fiber optic isolator and parameter measurement

## Specifications and Part List

He-Ne Laser	1.5 mW/LLL-2	1
Handheld Light Source	1310 nm/1550 nm	1
Light Power Meter with detector	LLM-2	1
Handheld Light Power Meter	1310 nm/1550 nm	1
White Screen	With crosshairs	1
Power Cord		3
Single-Mode Beam Splitter	1310 or 1550 nm	1
Optical Isolator	1310 or 1550 nm	1
Variable Optical Attenuator		1
Single-Mode Fiber	633 nm	2 m
Single-Mode Fiber	633 nm (1 FC/PC)	1 m
Multi-Mode Fiber	633 nm	2 m
Fiber Spool	1 km	1
Fiber Patch	1 m/3m	4/1
Fiber Stripper		1
Fiber Scribe		1
Mating Sleeve		5
Fiber Interference Demonstrator, 1 set, includes below items:		
Fiber Splitter	633 nm	1
Temperature Controller		1
Stress Controller		1
5-Axis Adjustable Stage		1
Beam Expander	$f' = 4.5$ mm	1
Fiber Clip		2
Fiber Support		1
Laser Holder	LEPO-44	1
Alignment Aperture		1