



OFI 200



OFI 400

OFI Optical Fiber Identifiers

Noyes Optical Fiber Identifiers are rugged, handheld, and easy-to-use fiber optic test instruments designed to detect optical signals transmitted through a single-mode fiber without disrupting traffic. During installation, maintenance, rerouting, or restoration; it is often necessary to isolate a specific fiber. By simply clamping an Optical Fiber Identifier onto a gently bent fiber, the unit will indicate if there is [No Signal], [Tone], or [Traffic] and identify signal direction.

The OFI 200 model and OFI 400 model Identifiers are equipped with a unique two-position head design that can be configured to work with 250 μm , 900 μm , ribbon, or jacketed fiber in seconds, without tools or adjustments. When testing coated fibers, the slim design of the OFI 200 and OFI 400 models allows easier access on a splice tray where the amount of work space is limited. The clamping trigger is ergonomically designed to fit the natural motion of the operator's hand. A high impact molded plastic case makes the OFI models suitable for use outside plant or in the central office.

The OFI 400 model is the next generation of Noyes Optical Fiber Identifiers. It has all the features of the OFI 200 model plus easy-to-read LCD display with Backlight, multiple [TONE] signal detection (270 Hz, 330 Hz, 1 kHz, or 2 kHz), power saving feature, and [Set Reference] feature. The OFI 400 model also measures and displays fiber core power or relative power on an LCD display.

Both models are battery operated with the battery indication feature and perform thousands of tests before batteries replacement is necessary.

Features

- Rugged, handheld, lightweight
- Accepts 250 μm , 900 μm coated fiber, 3 mm jacketed fiber cable, and ribbon fiber
- No head swapping or adjustments
- Identifies light carrying fiber
- Low insertion loss - traffic remains uninterrupted
- Indicates direction of traffic
- Indicates Tone signal visually and audibly
- 2 kHz Tone detection - OFI 200 models
- 270 Hz, 330 Hz, 1 kHz, and 2 kHz Tone detection - OFI 400 models
- Easy-to-read LCD display with Backlight - OFI 400 models
- Measures fiber core or relative power - OFI 400 models
- Power Off and Set Reference feature - OFI 400 models
- Battery operated
- Low battery indication
- Low cost, easy to use



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continued on the next page

OFI Optical Fiber Identifiers

Applications

- Live fiber identification - used during installation, maintenance, rerouting, or restoration to positively identify fibers prior to cutting and splicing
- Tone detection
- The OFI 400 models may also be used for measuring core power or relative power

Ordering Information

Model	Includes
OFI 200D	User's guide and carry case
OFI 400	User's guide and carry case

Specifications

Detectable signal range

Fiber Type	Parameter	Wavelength, Signal	OFI 200D	OFI 400
250 µm coated fiber (SMF-28 with 250 µm CPC6 coating)	Minimum detect level (average power, typical)	1310 nm, CW or Traffic 1310 nm, Tone 1550 nm, CW or Traffic 1550 nm, Tone	-40 dBm -43 dBm -45 dBm -50 dBm	-45 dBm -45 dBm -50 dBm -50 dBm
	Insertion loss (typical)	1310 nm 1550 nm	0.6 dB 2.5 dB	0.6 dB 2.5 dB
3 mm jacketed fiber (SMF-28 with 250 µm CPC6 coating and 3 mm, yellow jacket)	Minimum detect level (average power, typical)	1310 nm, CW or Traffic 1310 nm, Tone 1550 nm, CW or Traffic 1550 nm, Tone	-30 dBm -32 dBm -33 dBm -37 dBm	-30 dBm -30 dBm -33 dBm -33 dBm
	Insertion loss (typical)	1310 nm 1550 nm	0.8 dB 2.5 dB	1.0 dB 2.8 dB

Optical Specifications

Model	OFI 200D	OFI 400
Detector type	InGaAs	
Wavelength range	800 - 1700 nm	
Calibrated size of fiber and wavelength	N/A	250 µm (SMF-28) @1550 nm
Fiber stress	<100 kPSI max	
Fiber size	250 µm, 900 µm, 2 mm or 3 mm jacketed & ribbon fiber	
Tone detection	2000 ±100Hz	270, 330, 1000, or 2000 Hz (±5%)
Core power measurement range	N/A	+13 dBm to - 50 dBm SMF28/28E 250um @ 1550nm
Measurement units	N/A	dBm, dB

General Specifications

Display Type	N/A	Multi 7 segment LCD; 3 LEDs; 1 piezo buzzer
Power	1 x 9V Alkaline	2 x 1.5V Alkaline
Battery life	>10,000 operations typical	>10,000 operations typical
Operation temperature	0° to 50°C 90% RH (Non-condensing)	
Storage temperature	-30 to +60°C 90% RH (Non-condensing)	
Dimensions (H x W x D)	22 x 3.8 x 2.8 cm (8.5 x 1.5 x 1.1 in)	
Weight	210 g (7.5 oz)	168 g (6 oz)

Notes:

- 1 250 µm coated fiber parameters are specified with OFI plunger in the "250/900/RIB" position.
2mm/ 3mm jacketed fiber parameters are specified with OFI plunger in the "2 mm/ 3 mm" position.
- 2 Unless noted otherwise, all specifications are typical. Actual results can vary by several dB depending on fiber type, coating material, jacket color, jacket hardness, and other factors.
All specifications stated above are as measured at 25°C.
- 3 [CW] is a light signal that is not modulated.
[Traffic] is a light signal modulated by a random data sequence.
[Tone] is a light signal modulated into a nominal 50% duty cycle square wave.



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