

# extended range optical fiber identifier

# F6225

## Description

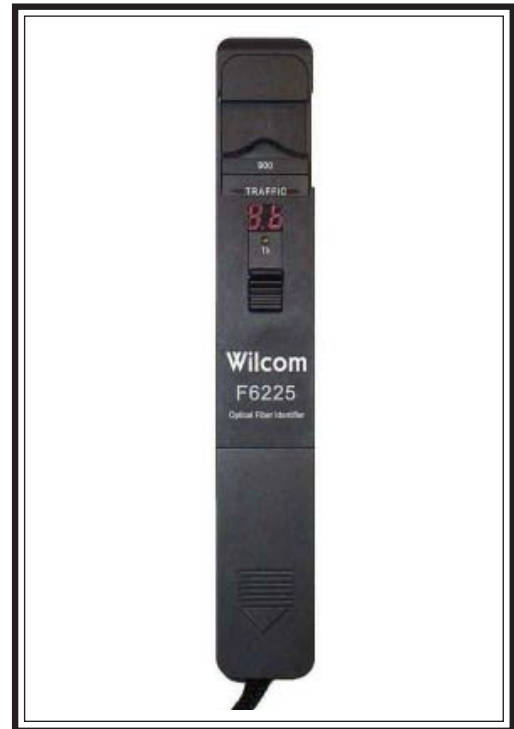
The **Model F6225 Extended Range Optical Fiber Identifier** is a rugged, easy-to-use installation and maintenance instrument which identifies optical fibers by detecting the optical signals being transmitted through a fiber.

The **Model F6225** is designed to meet both the needs of the telecommunications industry and the CATV industry. By utilizing local detection technology (*non-destructive macro-bend detection which does not damage or overstress the fiber*), the unit eliminates the need to open the fiber at the splice point for identification; eliminating the probability of interrupting service.

The **Model F6225** detects low frequency test tones at 270 Hz, 1000 Hz and 2000 Hz. When traffic is present on the fiber under test, an audible tone can be heard as well as the traffic direction which is indicated by LEDs illuminating on the probe. When one of the Test Tones is detected, the F6225 provides a rapid beep audible tone.

During installations, maintenance, rerouting, or restorations it is often necessary to isolate a specific fiber without disrupting service. A light source such as Wilcom's Model FS1316 used in conjunction with the **F6225** can make the job a lot easier.

The **F6225** includes a carrying pouch containing three easy to use field *interchangeable* adapter heads to accommodate; 900  $\mu$ m buffered fiber, ribbon or 250 $\mu$ m coated fiber and 3mm jacketed fiber.



## Features and Benefits

- ✓ **Rugged Metal Case**  
*The unit uses the same field proven lightweight rugged metal housing as the rest of Wilcom's Optical Fiber Identifier product line.*
- ✓ **Ambient Light Reduction Shield**  
*The F6225 has an integrated Ambient Light Reduction Shield to decrease the interference of ambient light during use.*
- ✓ **Audible Tones**  
*The F6225 provides different audible tones depending on signal present / traffic direction and detection of test tones.*
- ✓ **Core Power Display**  
*The F6225 can display Relative Core Power which is helpful in identifying bad connectors, splice points, verifying documentation etc.*
- ✓ **LED Indication**  
*LEDs indicate tone detection, Traffic presence, Traffic Direction, and Low Battery.*
- ✓ **Hands-Free-Operation**  
*With an easy to use thumb lock, hands-free operation can be enabled and disabled.*

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The F6225 **Optical Fiber Identifier** used in conjunction with Wilcom's stabilized Laser or LED Sources outlined below offer optimum fiber optic identification capability.

F6225	FS8513A	FS1318	FS1316
Wavelength	850 nm 1310 nm	1310 nm, 1490 nm 1550 nm	1310 nm 1550 nm
Presence of CW Signal	✘	✘	✘
Tone Detection	2 kHz	2 kHz 1 kHz 270 Hz	2 kHz 1 kHz 270 Hz

## Specifications

### Optical Characteristics:

Detection Technique	Non-destructive macro-bending
Typical loss in dB	<0.16 db @1310 nm typical
Spectral Response	850 nm to 1700 nm
Detector Sensitivity (MDSP)*	-45 dBm typical (equivalent core power)
Optical Tone Receiver	270 Hz, 1 kHz, 2 kHz
Minimum Fiber Slack	0.75 inches required for detection
Relative Core Power Reading	+24dBm to -58 dBm

**Fiber Type:** Singlemode fiber

### Fiber Compatibility:

Dual Window Singlemode	8 to 10 µm core diameter
Coating Diameter	250 µm diameter
Coating	Clear High Refractive Index Acrylate

Minimum Detector Sensitivity*	
900 mm Buffered Fiber Adapter	-45.0 dBm @1310nm typical -58.0 dBm @1550nm typical
250 mm Coated Fiber Adapter	-35.0 dBm @1310nm typical -45.0 dBm @1550nm typical
3mm Adapter	-24.0 dBm @1310nm typical -38.0 dBm @1550nm typical
Insertion Loss	
900 mm Adapter	< 0.01 db @1310nm typical < 0.37 db @1550nm typical
250 mm Adapter	< 0.16 db @1310nm typical < 1.10 db @1550nm typical
3mm Adapter	< 0.01 db @1310nm typical < 0.11 db @1550nm typical

\*Mean detectable signal power for singlemode fiber at 1550 nm.

### Electrical Characteristics:

Power Operation	One 9-volt Alkaline battery Approx. 8 hrs or 5000 readings
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### Environmental Conditions:

Operating Temperature	-20°C to +50°C
Storage Temperature	-40°C to +60°C
Humidity	0 to 90% non-condensing

### Physical

Length:	7.75 inches
Width:	1 1/4 inches
Depth:	1 inch
Weight:	8.0 oz.w/ Batt.



## Ordering Information:

Model	Part No.
F6225	30622510

Includes Fiber Optic Probe, carrying case and three (3) interchangeable adapter heads for jacketed, coated or ribbon fiber.

### Accessories:

2mm Adapter Head	04420688-01-RC-1
1.6mm Adapter Head	04420712-01-RC-1

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