

# optical ribbon fiber identifier

# F6121R

## Description

The **Wilcom Model F6121R Ribbon Fiber Identifier** is a lightweight, rugged, easy-to-use installation and maintenance instrument designed for fast, accurate identification and traffic testing of optical signals without cutting the fiber cable or interrupting service. By utilizing local detection technology (nondestructive macro-bend detection), this unit is ideal for use during routine maintenance and line modification, and can be used to locate a particular fiber line, non-obtrusively identify live fibers, and determine whether traffic is present.

The **Ribbon Fiber Identifier** detects low frequency 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.



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 **Ribbon Fiber Identifier** can make the job a lot easier.

The **Ribbon Fiber Identifier** includes three easy to use field changeable adapter heads. Two adapter heads are dedicated to ribbon fiber making the unit ideal for verifying signal presence or absence (live or dark fiber) on ribbon fiber. One adapter head is for use on *Bare Ribbon Fiber*, and the other adapter head is for use on *Jacketed Ribbon Fiber*. The third interchangeable adapter head is for testing 3mm patch cords.

## Features and Benefits

### ✓ Rugged Metal Case

*The F6121R uses the same field proven lightweight rugged metal housing as the rest of Wilcom's Optical Fiber Identifier product line.*

### ✓ Low Insertion Loss @ 1310 and 1550nm

*The lowest insertion loss in the industry eliminates system interruptions.*

### ✓ 850nm to 1700nm Range

*With the use of InGaAs detectors, the unit can be used on singlemode and multimode applications.*

### ✓ LED Indication

*LEDs indicate tone detection, Traffic presence, Traffic Direction, and Low Battery.*

### ✓ Audible Tone

*The unit provides an audible tone in the presence of a fiber optic signal.*

### ✓ Hands-Free-Operation

*With an easy to use thumb lock, hands-free operation can be enabled and disabled.*

**Wilcom**

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

F6121R	FS8513A	FS8514A	FS1316
Wavelength	850 nm 1310 nm	850 nm 1310 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:

(Using SMF-28)

Detection Technique	Non-destructive macro-bending
Spectral Response	800 nm to 1700 nm
Optical Tone Receiver	270 Hz, 1 kHz, 2 kHz
Minimum Fiber Slack	0.75 inches required for detection

### Minimum Detector Sensitivity\*

Bare Ribbon Fiber Adapter	-40.0 dBm @1310nm typical -50.0 dBm @1550nm typical
Jacketed Ribbon Fiber Adapter	-30.0 dBm @1310nm typical -40.0 dBm @1550nm typical
3mm Adapter	-32.5 dBm @1310nm typical -40.0 dBm @1550nm typical

### Insertion Loss

Ribbon Adapters	< 0.20 db @1310nm typical < 2.00 db @1550nm typical
3mm Adapter	< 0.11 db @1310nm typical < 0.80 db @1550nm typical

### Fiber Compatibility:

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

### Interchangeable Fiber Heads:

Bare Ribbon Fiber Adapter  
Jacketed Ribbon Fiber Adapter  
3mm Adapter

### Electrical Characteristics:

Power Operation One 9-volt Alkaline battery  
Approx. 10,000 readings

### Environmental Conditions:

Operating Temperature -20°C to +50°C  
Storage Temperature -40°C to +60°C  
Humidity 0 to 90% non-condensing  
Physical Length: 7.5 inches  
Width: 1 1/4 inches  
Depth: 1 inch  
Weight: 7.5 oz.

## Ordering Information:

Model	Part No.
<i>Basic:</i> F6121R	30612197-02

Includes Fiber Optic Probe, carrying case and three (3) interchangeable adapter heads.



Pending

\*Sensitivity is color dependent. The F6121R is less sensitive on dark colors such as Black, Brown, and Dark Blue

Specifications and prices are subject to change without notice.

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**ISO-9001:2000  
Registered**

**Wilcom**



POLYTEC GmbH

Polytec-Platz 1 - 7

D - 76337 Waldbronn

GERMANY

Tel: +49 (72 43) 60 41 74

Fax: +49 (72 43) 6 99 44

E-Mail: fo@polytec.de

www.polytec.de