

# Fiber OWL 7+ Singlemode Certifier

Part #: F7+S

Singlemode Tier 2 Certifier

## Applications

- Full-featured Tier 2 fiber link certification (Loss + OTDR) \*
- Full-featured Tier 1 fiber link certification (Loss) \*
- OTDR link characterization
- Optical fault location
- Visual fault location
- Visual fiber identification
- Fiber optic link length measurement
- Optical loss (attenuation) measurement \*
- Optical power measurement

## Features

- Singlemode ready
- Full-featured built-in OTDR
- Visual fault location / visual fiber identification
- Color-coded PASS / FAIL status \*
- Unlimited job configurations \*
- User-friendly Link Wizard with helpful color on-screen diagrams to help guide the setup process \*
- Context-sensitive help
- Auto-wavelength recognition and data storage reduces testing time and human error \*
- Up to 10,000 loss readings can be stored in memory
- Prints official certification reports via OWLView certification software, including comprehensive Tri-Reports \*
- High-capacity re-chargeable Lithium Polymer battery
- NIST Traceable
- Power meter adapters for 2.5mm (SC, ST, FC) and 1.25mm (LC) ferrule connectors
- Factory located in Heartland of America
- 2-year warranty



## Includes:

**Meter (singlemode):** Fiber OWL 7+ Singlemode Tier 2 Certifier (p/n: F7+S)

\* WaveSource Pro Singlemode Light Source required for loss measurement and link certification.  
Patch cables, adapters, and other related accessories not included.

**Accessories:** Hard-shell carrying case  
Protective rubber boot  
1.25mm in-adapter connector cleaners  
2.5mm / 1.25mm universal detector adapter caps  
USB download cables and battery chargers  
USB flash drive containing software and manual  
NIST certificate of calibration



**Factory located in the  
Heartland of America**



**Optical Wavelength Laboratories**

MANUFACTURER OF QUALITY OPTICAL FIBER TEST EQUIPMENT



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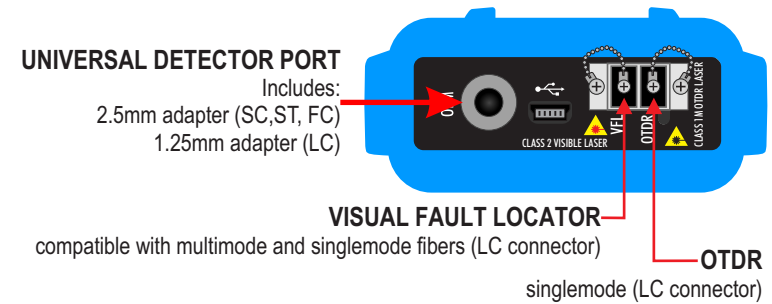
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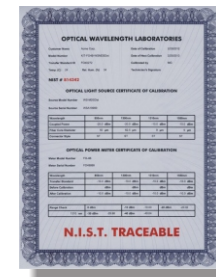
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| OTDR Specifications                     |  | General Specifications                     |                       | Optical Power Meter Specifications |   |
|---|--|--|-----------------------|------------------------------------|---|
| Fiber Type:                             | Singlemode   | Display:                                   | 2.8" Color LCD        | Photodetector:                     | InGaAs  |
| Output Wavelength:                      | 1310nm      1550nm   | Battery Type:                              | Lithium Polymer       | Fiber Type:                        | Multimode / Singlemode                              |
| Dynamic Range (SNR=1) <sup>1</sup> :    | 28 dB      27 dB   | Battery Life:                              | up to 20 hours        | Wavelengths:                       | 850, 980, 1300, 1310<br>1490, 1550, 1625            |
| Data Point Spacing (m):                 | Up to 64 km: 1<br>Over 64 km: 2  | Dimensions:                                | 2.87" x 4.42" x 1.25" | Accuracy:                          | 0.15 dB   |
| Pulse Width (m):                        | 1,2,5,10,20,50,100,200,500,1000  | Weight:                                    | 10 oz. (284 g)        | Resolution:                        | 0.01 dB   |
| Distance Accuracy (m):                  | Over 64km: 1 + (distance in meters/10000)<br>Over 64km: 2 + (distance in meters/10000) | <b>Visual Fault Locator Specifications</b> |                       | Measurement Units:                 | dBm / dB  |
| Distance Range (km) <sup>4</sup> :      | 128  | Output Wavelength:                         | 650nm                 | Measurement Range:                 | + 5 to -70 dBm<br>(typical; varies with wavelength) |
| Number of Stored Traces:                | Minimum Trace Distance: 3000+ / Maximum Trace Distance: 200                            | Output Power:                              | 1 mW                  |                                    |   |
| ORL Measurement:                        | up to 76dB   | Operating Modes:                           | CW / Flash            |                                    |   |
| Event Dead Zone(m) <sup>2</sup> :       | 2  |  |                       |                                    |   |
| Attenuation Dead Zone(m) <sup>3</sup> : | 5  |  |                       |                                    |   |
| Index of Refraction:                    | 1.4000 to 1.6000   |  |                       |                                    |   |
| Maximum Data Points:                    | 64000  |  |                       |                                    |   |

- 1: Using maximum pulse width
- 2: Width measured 1.5dB down on each side of a reflective event using 1 meter pulse width
- 3: Distance from event beginning to within 0.5dB where backscatter resumes using 1 meter pulse width
- 4: Out to furthest reflective event



**NOTE: A WaveSource Pro singlemode light source is required for optical loss measurement, fiber optic link certification, and report printing.**



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## Fiber Optic Light Sources

| PART NUMBER | DESCRIPTION                                     |
|-------------|---|
| WPSX        | WaveSource Pro SM Laser Source                  |
| WPSV        | WaveSource Pro SM Laser Source w/integrated VFL |

**NOTE:** A WaveSource Pro singlemode light source is required for optical loss measurement, fiber optic link certification, and report printing.

## Accessories

### Fiber Optic Inspection Microscopes

| PART NUMBER | DESCRIPTION                       |
|-------------|-----------------------------------|
| VS-400-U    | 400x USB Video Microscope         |
| FS400       | 400x Direct-view Field Microscope |

### Fiber Optic Cleaning Accessories

| PART NUMBER | DESCRIPTION                                 |
|-------------|---|
| FCC-2       | Ferrule Connector Cleaner                   |
| FCC-2R      | FCC-2 Replacement Cleaning Tape             |
| OC-2        | 2.5mm In-adapter Ferrule Connector Cleaner  |
| OC-1        | 1.25mm In-adapter Ferrule Connector Cleaner |

### Download Cables/Chargers

| PART NUMBER | DESCRIPTION                  |
|-------------|------------------------------|
| USB-1       | USB Download / Charger Cable |
| WS-USB      | USB Wall Charger             |

### Universal Adapter Caps

| PART NUMBER | DESCRIPTION                                  |
|-------------|--|
| U2.5-4      | 2.5mm Universal Adapter Cap (for SC, ST, FC) |
| U1.25-4     | 1.25mm Universal Adapter Cap (for LC)        |

## OTDR Fiber Rings

| PART NUMBER    | DESCRIPTION  |
|----------------|--|
| FR-SM-500-LCLC | 500 meter singlemode OTDR fiber ring (LC/LC)                 |
| FR-SM-500-LCSC | 500 meter singlemode OTDR fiber ring (LC/SC)                 |
| FR-M5-150-LCLC | 150 meter 50/125 $\mu$ m multimode OTDR fiber ring (LC/LC)   |
| FR-M5-150-LCSC | 150 meter 50/125 $\mu$ m multimode OTDR fiber ring (LC/SC)   |
| FR-M6-150-LCLC | 150 meter 62.5/125 $\mu$ m multimode OTDR fiber ring (LC/LC) |
| FR-M6-150-LCSC | 150 meter 62.5/125 $\mu$ m multimode OTDR fiber ring (LC/SC) |

## OTDR Dead Zone Boxes

| PART NUMBER | DESCRIPTION  |
|-------------|--|
| DZB-SM-1100 | 1100 meter singlemode OTDR dead zone box (SC)                |
| DZB-M5-450  | 450 meter 50/125 $\mu$ m multimode OTDR dead zone box (SC)   |
| DZB-M6-450  | 450 meter 62.5/125 $\mu$ m multimode OTDR dead zone box (SC) |

## Encircled Flux Mode Controller Cables

| PART NUMBER                 | EF-(core size)-(input port)-(output port) |
|-----------------------------|---|
| (core size)                 | M5 = 50/125 $\mu$ m M6 = 62.5/125 $\mu$ m |
| (light source input port)   | SC  |
| (output port)               | LC SC                                     |
| Part # example: EF-M5-SC-LC |   |

## Encircled Flux Mode Extender Cords

| PART NUMBER                   | EFXC-(core size)-(input port)-(output port)                   |
|-------------------------------|---|
| (core size)                   | M5 = 50/125 $\mu$ m M6 = 62.5/125 $\mu$ m                     |
| (input port)                  | LC SC (must match the output of the EF mode controller cable) |
| (output port)                 | LC SC (must match the link under test)                        |
| Part # example: EFXC-M5-SC-LC |   |

\* Note: when used with EF Mode Controllers, one of the connector options must match the output port of the EF mode controller, and the other must match the link under test.



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