

# 930XC OTDR

OPTICAL TIME-DOMAIN REFLECTOMETER



# 930XC OTDR

## ALL IN ONE OTDR SOLUTION

OPM, VFL, AND SLS  
STANDARD ON ALL  
930XC MODELS

### FAST.

- One button test functions. Start measurements with the push of one button.
- Autotest. Automatically sets test parameters for optimum test results.
- Live fiber testing.\* Tests fibers without disrupting live services.

### ACCURATE.

- Graphical interface. Easy to read, even in low or bright lighting conditions.
- Up to 38 dB dynamic range. Probe longer cables and see smaller reflections.
- Measure lengths and defects. Quickly locates faults.

### RELIABLE.

- Link Viewer annotates the entire fiber link in an easy to interpret Pass/Fail format.
  - Macrobend analysis locates troublesome fiber losses at 1550nm.
  - Cable acceptance reports. Generate customized reports that include trace signature and fiber events.
  - Long life battery. Work longer without recharge – up to 8 hours continuous use.
  - Rugged construction. Drop-tested from 2m, impact resistant and built to perform (GR-196 certified).
  - BellCore standard required by major telcos.
    - Meets all specifications at specified temperature extremes.
    - Operational and within specification after a simulated dust storm.
    - EMI resistant as per GR-1089.
    - Rain resistant with no direct paths
- \*930XC-30F only.

CABLE ACCEPTANCE | FAULT LOCATING | FIBER TESTING



Protective Rubber Boot

Menu Functions for settings and trace store/recall.

Large Color LCD Display

RUN/STOP Button True single button testing.

Sealed Membrane Panel



DC Charger Port

Optical Power Meter

USB Port

Visual Fault Locator

OTDR Port

OTDR 1625nm live out of band testing port

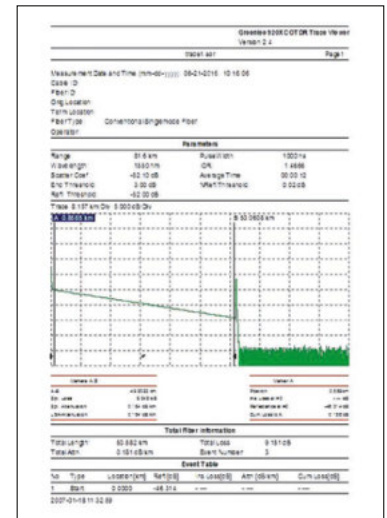
## OTDR CABLE ACCEPTANCE REPORT GENERATION

### MACROBEND ANALYSIS

- Quickly locate and measure losses at 1550nm
- User defined thresholds

## OTDR TRACE LINK VIEWER

- Automated Pass/Fail event analysis
- User defined thresholds
- Intuitive user interface for technician review

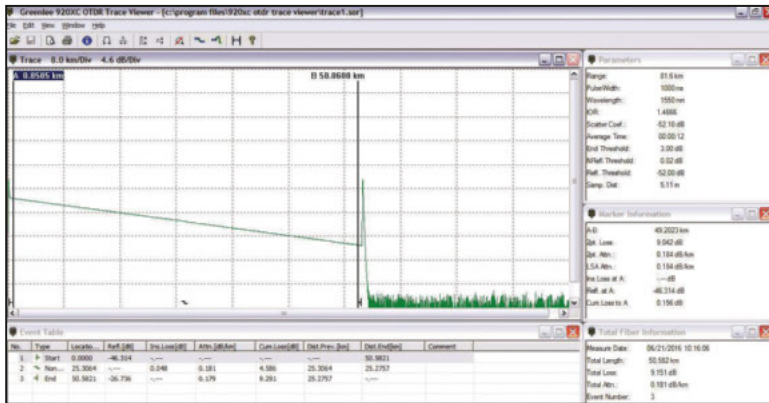
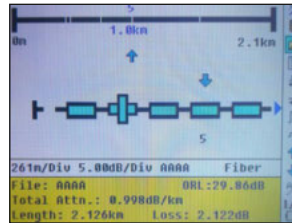


Now available with password protection

# OTDR CABLE ACCEPTANCE REPORT GENERATION

## LINK VIEWER

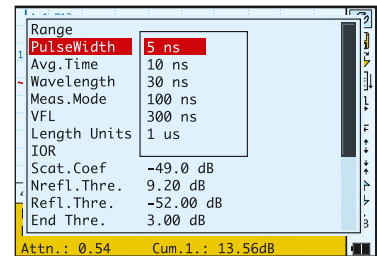
- Automated Pass/Fail event analysis
- User defined thresholds
- Intuitive user interface for technician review



## SPECIFICATIONS

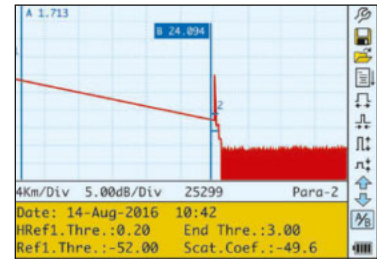
| MODEL                                 | 930XC-20C                                                             | 930XC-30F      | 930XC-30P      | 930XC-20M                                                                 |
|---------------------------------------|-----------------------------------------------------------------------|----------------|----------------|---------------------------------------------------------------------------|
| Wavelength (± 20nm)                   | 1310/1550                                                             | 1310/1550/1625 | 1310/1490/1550 | 850/1300                                                                  |
| Dynamic Range (dB) <sup>a</sup>       | 35                                                                    | 38/37/37       | 38/37/37       | 21/24                                                                     |
| Event Deadzone (m) <sup>b</sup>       | 1m                                                                    | 1m             | 1m             | ≤2.5m                                                                     |
| Attenuation Deadzone (m) <sup>b</sup> | 4.5m                                                                  | 4.5m           | 4.5m           | ≤12m                                                                      |
| Pulsewidth                            | 5, 10, 30, 100, 300, 1us, 2.5us, 10us, 20us                           |                |                | 12, 30, 100, 275, 1us/30, 100, 275, 1us, 2us                              |
| Selectable Ranges (km)                | 0.3, 1.3, 2.5, 5, 10, 20, 40, 80, 120, 160, 240                       |                |                | 0.1, 0.3, 0.5, 1.3, 2.5, 5, 10/0.1, 0.3, 0.5, 1.3, 2.5, 5, 10, 20, 40, 80 |
| Average Time                          | 15s/30s/1 min/2 min/3 min                                             |                |                |                                                                           |
| Distance                              | ±(1m + 5 X 10 <sup>-5</sup> x distance + sampling space)              |                |                |                                                                           |
| Measurement Accuracy                  | PC or APC (interchangeable FC, SC, ST)                                |                |                |                                                                           |
| Connector Type                        | ±4 dB                                                                 |                |                |                                                                           |
| Reflection Detect Accuracy            | ±0.05 dB/dB                                                           |                |                |                                                                           |
| Attenuation Detect Accuracy           | 1,000 test curves                                                     |                |                |                                                                           |
| Measurement Data Storage              | RS-232/USB port                                                       |                |                |                                                                           |
| Data Transmission                     | Visual Fault Locator (VFL)                                            |                |                |                                                                           |
| Visual Fault Locator (VFL)            | -3dBm; 650nm                                                          |                |                |                                                                           |
| Optical Power Meter (OPM)             | InGaAs                                                                |                |                |                                                                           |
| OPM Wavelengths                       | 850, 1300, 1310, 1490, 1550, 1625nm                                   |                |                |                                                                           |
| OPM Range                             | +6 to -70dBm (+6 to -60dBm 850nm)                                     |                |                |                                                                           |
| OPM Display resolution                | 0.01dB                                                                |                |                |                                                                           |
| OPM MOD Identification                | 1kHz, 2kHz                                                            |                |                |                                                                           |
| Stabilized laser Source (SLS)         | Wavelength same as selected in OTDR mode ≤ -7dBm                      |                |                |                                                                           |
| Power Supply                          | NiMH chargeable battery/AC adapter                                    |                |                |                                                                           |
| Battery Life                          | Support over 8 hours operating on one charge or over 20 hours standby |                |                |                                                                           |
| Operating Temperature                 | -10° to 50° C                                                         |                |                |                                                                           |
| Storage Temperature                   | -20° to 60° C                                                         |                |                |                                                                           |
| Relative Humidity                     | 0 to 95% (non-condensing)                                             |                |                |                                                                           |
| Weight                                | 1.9 lbs. (0.87 kg)                                                    |                |                |                                                                           |
| Dimensions                            | 7.7" H x 3.9" W x 2.4" L (196mm x 100mm x 64mm)                       |                |                |                                                                           |
| Compliance                            | BelCore GR196, CE, FCC, UL, WEEE                                      |                |                |                                                                           |
| Fiber Analysis Software               | Version 3.2                                                           |                |                |                                                                           |
| Password Protection                   | Owner defined password feature (Recoverable)                          |                |                |                                                                           |

# OTDR OPERATION MODES



## INSTRUMENT SETUP

- Auto mode selects optimal distance range and pulsewidth
- All settings selected through easy to use menu selections
- Short pulsewidth (5ns) available for high-resolution measurements
- Color and high intensity monochrome settings for bright sunlight conditions
- Complete control of fiber analysis settings for auto measurement of splice and end of fiber



## OTDR TRACE

- View and measure test results
- One button measurement of distance and loss information

## Event View Mode

Page through each loss event for location in (meters/miles and feet) and loss in dB

## Manual Measurement Mode

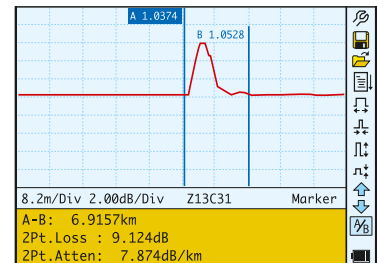
Perform manual measurement with A and B cursor for distance, loss and reflectance measurements

## Measurement Setup

View settings used to acquire measurement

## Fiber Analysis Software

View settings used for auto measurement of events



## HI-RESOLUTION EVENT VIEWING

- Easy to view and measure in high-resolution mode
- One button to jump to high-resolution view
- One button jump back to entire trace view
- 0.1 meter sampling resolution
- Active cursor snaps to the next event in the fiber analysis table

\*Specifications subject to change without notice <sup>a</sup> Using a pulse width of 20us <sup>b</sup> Using a pulse width of 5ns measuring a -45dB event



# 930XC OTDR

## OPTICAL TIME-DOMAIN REFLECTOMETER

FOR PRODUCT VIDEOS,  
DEMONSTRATIONS AND MORE VISIT:  
<http://bit.ly/GreenleeCommsYouTube>

### EACH MODEL COMES WITH:

- Instrument
- Rechargeable battery
- OTDR Trace Viewer software
- Installation disk
- Data transfer cable
- AC adapter
- Protective cover
- Carrying case
- Warranty card

Default language is English and Spanish. Alternate languages of Russian, Portuguese, Polish, French and German available upon request.



### ORDERING INFORMATION

| CAT NO.                                             | UPC NO. | DESCRIPTION                                      |
|-----------------------------------------------------|---------|--------------------------------------------------|
| <b>DUAL WAVELENGTH SINGLE MODE OTDR</b>             |         |                                                  |
| 930XC-20C-UPC-FC                                    | 02610   | OTDR, SM DUAL WAVE, 13/15, OPM, SLS, UPC FC      |
| 930XC-20C-UPC-SC                                    | 02609   | OTDR, SM DUAL WAVE, 13/15, OPM, SLS, UPC SC      |
| 930XC-20C-UPC-ST                                    | 02611   | OTDR, SM DUAL WAVE, 13/15, OPM, SLS, UPC ST      |
| 930XC-20C-APC-FC                                    | 02613   | OTDR, SM DUAL WAVE, 13/15, OPM, SLS, APC FC      |
| 930XC-20C-APC-SC                                    | 02612   | OTDR, SM DUAL WAVE, 13/15, OPM, SLS, APC SC      |
| <b>TRIPLE WAVELENGTH SINGLE MODE OTDR</b>           |         |                                                  |
| 930XC-30P-UPC-FC                                    | 02615   | OTDR, SM TRIPLE PON, 13/14/15, OPM, SLS, UPC FC  |
| 930XC-30P-UPC-SC                                    | 02614   | OTDR, SM TRIPLE PON, 13/14/15, OPM, SLS, UPC SC  |
| 930XC-30P-UPC-ST                                    | 02616   | OTDR, SM TRIPLE PON, 13/14/15, OPM, SLS, UPC ST  |
| 930XC-30P-APC-FC                                    | 02618   | OTDR, SM TRIPLE PON, 13/14/15, OPM, SLS, APC FC  |
| 930XC-30P-APC-SC                                    | 02617   | OTDR, SM TRIPLE PON, 13/14/15, OPM, SLS, APC SC  |
| <b>TRIPLE WAVELENGTH SINGLE MODE FILTERED OTDRS</b> |         |                                                  |
| 930XC-30F-UPC-FC                                    | 02620   | OTDR, SM TRIPLE FILT, 13/15/16, OPM, SLS, UPC FC |
| 930XC-30F-UPC-SC                                    | 02619   | OTDR, SM TRIPLE FILT, 13/15/16, OPM, SLS, UPC SC |
| 930XC-30F-UPC-ST                                    | 02621   | OTDR, SM TRIPLE FILT, 13/15/16, OPM, SLS, UPC ST |
| 930XC-30F-APC-FC                                    | 02626   | OTDR, SM TRIPLE FILT, 13/15/16, OPM, SLS, APC FC |
| 930XC-30F-APC-SC                                    | 02623   | OTDR, SM TRIPLE FILT, 13/15/16, OPM, SLS, APC SC |
| <b>MULTI-MODE OTDR</b>                              |         |                                                  |
| 930XC-20M-UPC-FC                                    | 02607   | OTDR, MM DUAL WAVE, 85/13, OPM, SLS, UPC FC      |
| 930XC-20M-UPC-SC                                    | 02606   | OTDR, MM DUAL WAVE, 85/13, OPM, SLS, UPC SC      |
| 930XC-20M-UPC-ST                                    | 02608   | OTDR, MM DUAL WAVE, 85/13, OPM, SLS, UPC ST      |
| <b>SINGLE MODE/MULTI-MODE OTDR KIT</b>              |         |                                                  |
| SM MM KIT                                           | 27294   | 930XC-20M-UPC-SC and 930XC-20C-APC-SC            |

| CAT NO.                 | UPC NO. | DESCRIPTION                            |
|-------------------------|---------|----------------------------------------|
| <b>ACCESSORIES</b>      |         |                                        |
| AC-ADPT-20-UNI          | 25691   | Universal Power Supply                 |
| AC-CONN-FC-L2           | 20996   | FC Connector (For UPC & APC)           |
| AC-CONN-ST-L2           | 20997   | ST Connector (For UPC)                 |
| AC-CONN-SC-UPC-L2       | 06445   | SC Connector (For UPC)                 |
| AC-CONN-SC-APC-L2       | 20998   | SC Connector (For APC)                 |
| ADAPTER, OPM SC (930XC) | 06446   | OPM SC Adapter                         |
| ADAPTER, OPM FC (930XC) | 06447   | OPM FC Adapter                         |
| ADAPTER, OPM ST (930XC) | 06448   | OPM ST Adapter                         |
| AC-CONN-ST-L2           | 20997   | ST Connector (For UPC Only)            |
| 1155-0526               | 10582   | Vehicle Adapter (6FT, 5.5 OD, 2.1M)    |
| 20988                   | 20988   | Soft Carry Case                        |
| 20989                   | 20989   | USB Cable For OTDR                     |
| 20990                   | 20990   | RS-232 Cable                           |
| 20999                   | 20999   | NiMH Battery (9.6V)                    |
| 946                     | 60571   | Cleaning Wand (10/PK)                  |
| 948                     | 60692   | ReelCleaner™ Connector Cleaning System |
| LC-500                  | 05625   | 500m Universal Launch Cable            |
| FCP-2.5                 | 03576   | 2.5mm Fiber Cleaning Pen               |
| FCP-1.25                | 03577   | 1.25mm Fiber Cleaning Pen              |

Greenlee Communications sells a variety of 1m patch cords to protect your bulkhead. Please contact customer service for more details.