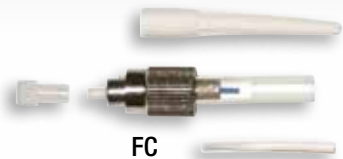


# FIBER SPLICING AND TESTING SOLUTIONS

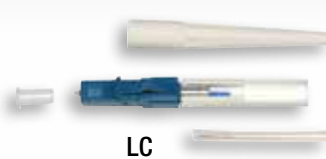
OTDR • FUSION SPLICER • SPLICE ON CONNECTORS



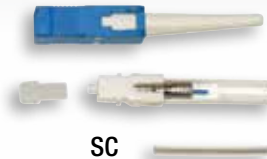
**FAST. ACCURATE. RELIABLE.**



FC



LC



SC



ST





# 930XC OTDR

## OPTICAL TIME DOMAIN REFLECTOMETER

OPM, VFL, and SLS standard on all 930XC models

### FAST

- Easy to read graphical interface
- One button test functions
- Automatically sets parameters for optimum test results
- Live fiber testing\*

### ACCURATE

- Up to 38 dB dynamic range
- Generate professional cable acceptance reports

### RELIABLE

- Long battery life – up to 8 hours of continuous use.
- Rugged construction – water and dust resistant, drop tested from 2m (GR-196 certified).

The 930XC is BellCore certified, as required by many major Telcos.

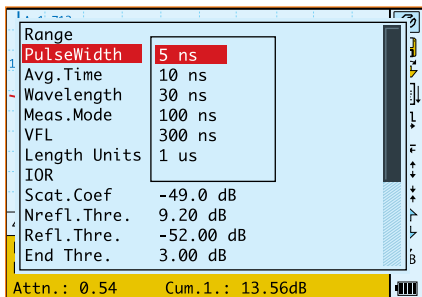
\* 930XC-30F only.

## SPECIFICATIONS

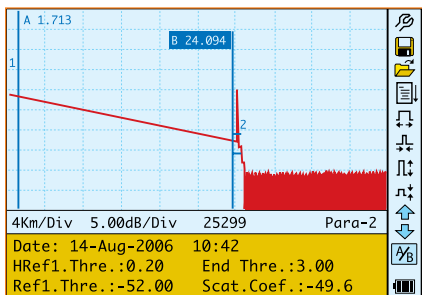
	930XC-20C	930XC-30F	930XC-30P	930XC-20M
<b>Wavelength (<math>\pm 20\text{nm}</math>)</b>	1310/1550	1310/1550/1625	1310/1490/1550	850/1300
<b>Dynamic Range (dB)</b>	35	38/37/37	38/37/37	21/24
<b>Event Deadzone (m)</b>	$\leq 2.5\text{m}$	$\leq 2.0\text{m}$	$\leq 2.5\text{m}$	$\leq 2.5\text{m}$
<b>Attenuation Deadzone (m)</b>	$\leq 14\text{m}$	$\leq 14\text{m}$	$\leq 14\text{m}$	$\leq 12\text{m}$
<b>Pulsewidth</b>	5, 10, 30, 100, 300, 1 $\mu\text{s}$ , 2.5 $\mu\text{s}$ , 10 $\mu\text{s}$ , 20 $\mu\text{s}$			12, 30, 100, 275, 1 $\mu\text{s}/30$ , 100, 275, 1 $\mu\text{s}$ , 2 $\mu\text{s}$
<b>Selectable Ranges (km)</b>	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
<b>Average Time</b>	15s/30s/1 min/2 min/3 min			
<b>Distance Measurement Accuracy</b>	$\pm(1\text{m} + 5 \times 10^{-5} \times \text{distance} + \text{sampling space})$			
<b>Connector Type</b>	PC or APC (interchangeable FC, SC, ST)			
<b>Reflection Detect Accuracy</b>	$\pm 4\text{dB}$			
<b>Attenuation Detect Accuracy</b>	$\pm 0.05\text{dB/dB}$			
<b>Measurement Data Storage</b>	1,000 test curves			
<b>Data Transmission</b>	RS-232/USB port			
<b>Visual Fault Locator (VFL)</b>	3mW; 650nm			
<b>Optical Power Meter (OPM)</b>	InGaAs			
<b>OPM Wavelengths</b>	850, 1300, 1310, 1490, 1550, 1625nm			
<b>OPM Range</b>	+6 to -70dBm (+6 to -60dBm 850nm)			
<b>OPM Display resolution</b>	0.01dB			
<b>OPM MOD Identification</b>	1kHz, 2kHz			
<b>Stabilized laser Source (SLS)</b>	Wavelength same as selected in OTDR mode $\leq -7\text{dBm}$			
<b>Power Supply</b>	NiMH chargeable battery/AC adapter			
<b>Battery Life</b>	Support over 8 hours operating on one charge or over 20 hours standby			
<b>Operating Temperature</b>	$-10^{\circ}$ to $50^{\circ}\text{C}$			
<b>Storage Temperature</b>	$-20^{\circ}$ to $60^{\circ}\text{C}$			
<b>Relative Humidity</b>	0 to 95% (non-condensing)			
<b>Weight</b>	1.9 lbs. (0.87 kg)			
<b>Dimensions</b>	7.7" H x 3.9" W x 2.4" L (196mm x 100mm x 64mm)			
<b>Compliance</b>	BellCore GR196, CE, FCC, UL, RoHS, WEEE			
<b>Fiber Analysis Software</b>	Version 3.2			

\* Specifications subject to change without notice.

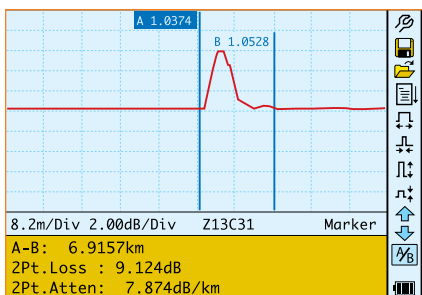
## OTDR OPERATION MODES



### INSTRUMENT SETUP



### OTDR TRACE



### HI-RESOLUTION EVENT VIEWING

# 910FS

## OPTICAL FUSION SPLICER

910FS-KIT2



### VERSATILE.

Designed to meet virtually any FTTx installation – indoors and out. P2P installations including backhaul, cellular, and LAN.

### CORE ALIGNMENT.

Minimizes splice losses.

### FEATURE PACKED.

Fully compatible with Greenlee® Splice-On Connectors. 250 Splice/ Shrink cycles per battery charge.

## SPECIFICATIONS

Applicable Fibers	SM (G.652); MM (G.651); DS (G.653); NZDS (G.655); BIF (G.657)
Fiber Cleaved Length	10mm
Cladding Diameter	80 to 150µm
Coating Diameter	100 to 1000µm
Fiber Count	Single
Fiber Aligning Method	Auto Core Alignment
Splice Loss (Typical)	0.02 dB (SM); 0.01 dB (MM); 0.04 dB (DS); 0.04 dB (NZDS & BIF)
Splicing Mode	60 Preset / User Definable Modes
Splice Time (Typical)	9 seconds (SM)
Number Of Splices Per Battery Charge	250 (including 60mm heat shrink cycle)
Splice-On-Connector	SC, LC, FC, ST
Arc Calibration Mode	Automatic and Manual
Protection Sleeve Length	60mm, 40mm, Micro Sleeves
Storage Of Splice Results	5,000 Results

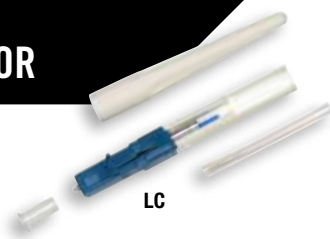
\* Specifications subject to change without notice.

Tension Test	2N
Fiber Display Magnification	240X
Tube Heating Mode	20 Preset / User Definable Modes Adjustable 0-240 seconds
Tube Heating Time (Typical)	36 seconds
Attenuator Mode	0.1 to 15 dB
Electrode Life	3,000 Splices
Display	5.7" Color, Turn-Over LCD
Connectivity	RS-232; USB
Operating Conditions	Pressure: 0 to 16,404 feet (0 to 5,000 meters) above Sea Level Humidity: 0 to 95% Temperature: 14 to 122°F (-10 to 50°C)
Storage Conditions	Temperature: -4 to 158°F (-20 to 70°C)
Power Supply	100 to 240V AC Adapter; Li-ion Battery (6600 mAh)
Weight (Including Battery)	6.92 lbs (3.14 kg)
Dimensions (HxWxD)	7.08" x 6.29" x 6.10" (180 x 160 x 155 mm)

# SOC

## SPLICE-ON CONNECTOR

For best results, use with the 910FS Optical Fusion Splicer.



## SPECIFICATIONS

Connector Type	SM/APC	SM/UPC	MM/62.5UM	MM/50UM	MM/OM3	MM/OM4
Insertion Loss (Max)	0.3dB		0.4dB			
Optical Return Loss	>65dB	>55dB	35dB (typical)			
Ferrule Type	All Zirconia Pre-Polished Ferrules					
Color Code	Green	White	Beige	Black	Aqua	Aqua
Operating Temperature	-40 to +85 degrees C					
Industry Standards	RoHS Compliant, Telcordia GR-326-CORE Compliant					

\* Specifications subject to change without notice.

### SAVE TIME.

Factory-terminated connectors – no need to cleave fiber.

### EASIER TO USE.

900 µm fiber stub for easy splices every time.

### COST EFFECTIVE.

Reduce rework. Get the job done faster and easier.

## COMPATIBLE FUSION SPLICERS

Manufacturer	GREENLEE	AFL		SUMITOMO	FITEL
Model	910FS	FSM-11 (S/M) FSM-50R	FSM-18 (S/R) FSM-17 (S/R) FSM-60 (S/R)	Type-25e (U/S/M) Type-39, 46, 65, 66 Q101-CA	S122 (A/C/M) S121 (A/M), S123 (C/M) S153, S178 (A)
Compatible fibertools™ SOC's	All versions	All versions	SC & LC ONLY	All versions	All versions
Boot Size	900µm				Both 900µm & 3.0mm

The user must select the appropriate SOC adapter for use in non Greenlee fusion splicers.

FOR PRODUCT VIDEOS, DEMONSTRATIONS  
AND MORE, SCAN THIS QR CODE OR VISIT:

[www.youtube.com/GreenleeDEMO](http://www.youtube.com/GreenleeDEMO)



## 930XC 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

CAT NO.	UPC NO.	DESCRIPTION
<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>ACCESSORIES</b>		
SM MM KIT	27294	930XC-20M-UPC-SC and 930XC-20C-APC-SC Kit
AC-ADPT-20-UNI	25691	Universal Power Supply
AC-CONN-FC-L2	20996	FC Connector (For UPC & APC)
AC-CONN-SC-L2	20998	SC Connector (For UPC & APC)
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	2.5mm Cleaning Wand (10/PK)
948	60692	ReelCleaner™ Connector Cleaning System

## SOC ORDERING INFORMATION

CAT. NO. (12 PK)	UPC	CAT. NO. (100 PK)	UPC	DESCRIPTION
SCAPC-SOC-12	02302	SCAPC-SOC-100	02360	SC/APC Singlemode, Green 900µm Boot
SCUPC-SOC-12	02303	SCUPC-SOC-100	02361	SC/UPC Singlemode, Blue 900µm Boot
SC62-SOC-12	02304	SC62-SOC-100	02364	SC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
SC50-SOC-12	02305	SC50-SOC-100	02365	SC/PC 50µm Multimode (OM2), Black 900µm Boot
SCOM3-SOC-12	02306	SCOM3-SOC-100	02368	SC/PC 50µm Multimode (OM3), Aqua 900µm Boot
SCOM4-SOC-12	02308	SCOM4-SOC-100	02371	SC/PC 50µm Multimode (OM4), Aqua 900µm Boot
FCAPC-SOC-12	02313	FCAPC-SOC-100	02372	FC/APC Singlemode, Green 900µm Boot
FCUPC-SOC-12	02314	FCUPC-SOC-100	02377	FC/UPC Singlemode, Blue 900µm Boot
FC62-SOC-12	02316	FC62-SOC-100	02378	FC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
FC50-SOC-12	02322	FC50-SOC-100	02379	FC/PC 50µm Multimode (OM2), Black 900µm Boot
FCOM3-SOC-12	02323	FCOM3-SOC-100	02381	FC/PC 50µm Multimode (OM3), Aqua 900µm Boot
FCOM4-SOC-12	02328	FCOM4-SOC-100	02384	FC/PC 50µm Multimode (OM4), Aqua 900µm Boot
STUPC-SOC-12	02330	STUPC-SOC-100	02385	ST/UPC Singlemode, Blue 900µm Boot
ST62-SOC-12	02332	ST62-SOC-100	02386	ST/PC 62.5µm Multimode (OM1), Beige 900µm Boot
ST50-SOC-12	02334	ST50-SOC-100	02387	ST/PC 50µm Multimode (OM2), Black 900µm Boot
STOM3-SOC-12	02335	STOM3-SOC-100	02388	ST/PC 50µm Multimode (OM3), Aqua 900µm Boot
STOM4-SOC-12	02343	STOM4-SOC-100	02389	ST/PC 50µm Multimode (OM4), Aqua 900µm Boot
LCAPC-SOC-12	02345	LCAPC-SOC-100	02390	LC/APC Singlemode, Green 900µm Boot
LCUPS-SOC-12	02346	LCUPS-SOC-100	02395	LC/UPC Singlemode, Blue 900µm Boot
LC62-SOC-12	02348	LC62-SOC-100	02397	LC/PC 62.5µm Multimode (OM1), Beige 900µm Boot
LC50-SOC-12	02351	LC50-SOC-100	02398	LC/PC 50µm Multimode (OM2), Black 900µm Boot
LCOM3-SOC-12	02355	LCOM3-SOC-100	02399	LC/PC 50µm Multimode (OM3), Aqua 900µm Boot
LCOM4-SOC-12	02359	LCOM4-SOC-100	02400	LC/PC 50µm Multimode (OM4), Aqua 900µm Boot
<b>ADAPTERS – FOR USE WITH 910FS FUSION SPLICER</b>				
910FS-SOC-ST-FC	02401	ADAPTER, SPLICE ON CONN ST & FC (910FS)		
910FS-SOC-SC-LC	01335	ADAPTER, SPLICE ON CONN SC & LC (910FS)		

## 910FS ORDERING INFORMATION

CAT NO.	UPC NO.	DESCRIPTION
910FS	01328	Optical Fusion Splicer
910FS-KIT1	01433	Fusion Splicer & Cleaver Kit
910FS-KIT2	01432	Contractor Fusion Splicer Kit
910FS-ELEC	01329	Replacement Electrodes
910FS-PS	01330	Replacement Power Supply
910CL	01331	Optical Fiber Cleaver
910CL-BLADE	16403	Cleaving Wheel
910FS-250	01332	250µm Adapter
910FS-900	01333	900µm Adapter
910FS-SOC-SC-LC	01335	Adapter, Splice-On Connector, SC & LC
910FS-SOC-ST-FC	02401	Adapter, Splice-On Connector, ST & FC
910FS-BATT	01452	Battery (910FS)
910FS-EUR-CORD	25719	European Line Cord
910FS-UK-CORD	25702	UK Line Cord
910FS-CHARG	02641	Battery Charger
910FS-CAR-ADAPTER	25689	12 V DC Car Adapter
PA1171	12225	ProGrip 5-in-1 Fiber Optic Stripper

*910FS-Kit1 contains splicer, Fiber Cleaving tool, 250/900µm Adapters and SC/LC Splice-On Connector adapter.*

*910FS-KIT2 contains Splicer, Fiber Cleaving tool, 250/900µm adapters, SC/LC Splice-On Connector adapter, spare Li-ion battery and ProGrip fiber optic stripper.*



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