



**GREENLEE®**  
**COMMUNICATIONS**

A Textron Company

**MADE FOR THE TRADE!™**



**International**

***Fibre***

**Catalogue**

## Introduction

Welcome to the International Fibre Catalogue from Greenlee Communications Ltd. This catalogue consolidates the portfolio of products available from Greenlee Communications for the Professional installation and maintenance of fibre optic cabling systems.

It covers our complete range of instruments and solutions for: Fusion splicing, Inspection, Cleaning and Testing of fibre networks.

The range of fibre Test Instruments provided by Greenlee Communications covers easy to operate and economically priced; Fusion Splicers, Fibre Fault Locators (field use Handheld OTDRs), a wide selection of Optical Power Meters, Light Sources, Live Fibre Identifiers, Visual Fault Locators and Video Inspection solutions in the Greenlee Mini Fibre Tools and XL fiberTOOLS™ ranges, Intelligent Optical Loss Test Sets in the 525 Series and high specification, zero dead zone fault locators for specialist applications in our benchtop Optical Fibre Monitor range.

Included alongside these test sets are fibre stripping and preparation tools, cleaning products and a range of accessory items to enable you to outfit technicians performing fibre optic installation and maintenance on multi-mode and single-mode networks.

These products complete the Greenlee promise of delivering quality, professional tools and test products, all designed to perform and Made for the Trade!™



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## 910FS Optical Fusion Splicer



### FEATURES

- 5.7" Flip-Over LCD Screen
- Core Alignment for Reduced Losses
- Removable Adaptors for Splice-On-Connectors (FIS-SC, LC)
- Includes 250µm, 900µm, Bow-Tie, and Splice on Connector Adaptors (FIS-SC, LC)
- Auto-Check Fibre End Face
- Auto-Calculation of Estimated Splice Loss
- Selectable Heating Modes
- Rugged Carrying Case

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52064876	910FS	OPTICAL FUSION SPLICER
52063414	910FS-ELEC	REPLACEMENT ELECTRODES
52063416	910FS-PS	REPLACEMENT POWER SUPPLY
52064877	910CL	OPTICAL FIBRE CLEAVER
52064143	910FS-250	250µm ADAPTOR (PAIR)
52064142	910FS-900	900µm ADAPTOR (PAIR)
52064144	910FS-BOWTIE	BOW-TIE ADAPTOR (PAIR)
52064141	910FS-SOC-SC	SPLICE-ON-CONNECTOR ADAPTOR (SC AND LC)
52063415	910FS-BATT	BATTERY (910FS)
52064875	910FS-KIT1	CONTRACTOR FUSION SPLICER KIT <ul style="list-style-type: none"> <li>• 910FS Optical Fusion Splicer</li> <li>• 910CL Optical Fibre Cleaver</li> </ul>
52064874	910FS-KIT2	CONTRACTOR FUSION SPLICER KIT <ul style="list-style-type: none"> <li>• 910FS Optical Fusion Splicer</li> <li>• 910CL Optical Fibre Cleaver</li> <li>• PA1171 Fibre Stripper</li> <li>• Extra Rechargeable Li-ion Battery</li> </ul>

### SPECIFICATIONS

Applicable Fibres	SM (G.652); MM (G.651); DS (G.653); NZDS (G.655); ITU-T G.657
Fibre Cleaved Length	10mm
Cladding Diameter	80 to 150µm
Coating Diameter	100 to 1000µm
Fibre	Single
Fibre Aligning Method	Auto Core Alignment
Splice Loss (Typical)	0.02dB (SM); 0.01dB (MM); 0.04dB (DS); 0.04dB (NZDS)
Splicing Mode	60 Preset / User Definable Modes
Splice Time (Typical)	9 seconds (SM)
Splice-On-Connector	FIS brand LC and SC
Arc Calibration Mode	Automatic and Manual
Protection Sleeve Length	60mm, 40mm, Micro Sleeves
Storage of Splice Results	5000 Results
Tension Test	2N
Fibre Display Magnification	240x
Tube Heating Mode	Adjustable 20-60 seconds
Tube Heating Time (Typical)	30 seconds
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 Adaptor; Li-ion Battery (6600mAh)
Weight (Including Battery)	6.92lbs (3.14 kg)
Dimensions (HxWxD)	7.08 x 6.29 x 6.10 inch (180 x 160 x 155mm)

## 910CL Optical Fibre Cleaver

### FEATURES

- Cleaves Single-Mode and Multi-Mode Fibre
- Blades rotate for long life
- Adaptors available for 250µm, 900µm, Bow-Tie, and Splice-On-Connector (SC and LC)
- No batteries or power required



### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52064877	910CL	OPTICAL FIBRE CLEAVER
520064141	910FS-SOC-SC	SPLICE-ON-CONNECTOR ADAPTOR (SC AND LC)
52064143	910FS-250	250µm ADAPTOR (PAIR)
52064142	910FS-900	900µm ADAPTOR (PAIR)
52064144	910FS-BOWTIE	BOW-TIE ADAPTOR (PAIR)
52055935	PA1171	BUFFER STRIPPERS
52051283	PA1511	KEVLAR SCISSORS

### SPECIFICATIONS

Applicable Fibres	SM (G.652); MM (G.651); DS (G.653); NZDS (G.655); ITU-T G.657
Fibre Cleaved Length	10mm
Cladding Diameter	125µm
Coating Diameter	0.25mm and 0.9mm
Fibre Count	Single
Cleaving Angle	1.5°
Blade Rotation Positions	0.75°
Blade Life	12,000 Cleaves
Weight	255g
Dimensions	58 x 55 x 48mm
Splice-On-Connector	Adaptors available for FIS brand



## 920XC Handheld Multimode OTDR



### FEATURES

- 850/1300nm wavelength
- Compact handheld design
- Easy to use
- Fast automated testing
- Up to 22dB dynamic range
- Large backlight LCD display
- Measure length and defects of coiled fibre
- Fibre analysis software for data management and report generation
- RS-232/USB interface
- NiMH batteries for 8 hours continuous use

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
52047377	25688	920XC-20M-FC MULTI MODE OTDR W/FC BULKHEAD
52047378	25689	920XC-20M-SC MULTI MODE OTDR W/SC BULKHEAD
52047379	25690	920XC-20M-ST MULTI MODE OTDR W/ST BULKHEAD
52034541	20988	920XC CARRY CASE
52026957	20996	AC-CONN-FC-L2 FC CONNECTOR (For UPC & APC)
52026958	20997	AC-CONN-ST-L2 ST CONNECTOR (Only FOR UPC)
52026959	20998	AC-CONN-SC-L2 SC CONNECTOR (For UPC & APC)
52047065	25691	AC-ADPT-20-UNI POWER SUPPLY, UNIVERSAL

### SPECIFICATIONS

FIBRE TYPE	920XC-20M	
Wavelength (± 20nm)	850	1300
Dynamic Range (dB)	18	22
Event deadzone (m)	7	
Attenuation Deadzone (m)	20	
Emitter Type	LED	
Pulsewidth (ns)	12/30/100/275/1µs	30/100/275/1µs/2µs
Selectable Ranges (km)	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/1min/2min/3min	
Distance measurement accuracy	±(1m + 5 x 10 <sup>-5</sup> x distance + sampling space)	
Connector Type	PC (interchangeable FC, SC, ST)	
<b>FIBRE ANALYSIS SOFTWARE</b>		
Reflection detect accuracy	±4dB	
Attenuation detect accuracy	±0.05dB/dB	
Measurement data storage	1,000 test curves	
Data transmission	RS-232/USB port	
<b>GENERAL</b>		
Power Supply	NiMH chargeable battery/AC adaptor	
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. (0.87kg)	
Dimensions	7.7" H x 3.9" W x 2.4" L (196mm x 100mm x 64mm)	

## 920XC Handheld Singlemode OTDR



### FEATURES

- 2 & 3 wavelength options available: 1310/1550nm; 1310/1490/1550nm; 1310/1550/1625nm
- Up to 35dB on the 2 wavelength model and up to 38dB on the 3 wavelength models
- Large backlight LCD display
- Measure length and defects of coiled fibre
- Fibre analysis software for data management and report generation
- 1625nm operation for live fibre testing
- RS-232/USB interface
- NiMH batteries for 8 hours continuous use

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
<b>DUAL WAVELENGTH 1310/1550NM</b>		
52026992	89872	920XC-20C SINGLE MODE OTDR,1310/1550nm FC/UPC
52026997	89877	920XC-20C SINGLE MODE OTDR,1310/1550nm ST/UPC
52027002	89882	920XC-20C SINGLE MODE OTDR,1310/1550nm SC/UPC
52027007	89887	920XC-20C SINGLE MODE OTDR,1310/1550nm FC/APC
52027013	89892	920XC-20C SINGLE MODE OTDR,1310/1550nm SC/APC
<b>TRI-WAVELENGTH 1310/1490/1550NM</b>		
52056520	19238	920XC-30P SINGLE MODE OTDR, 1310/1490/1550nm FC/UPC
52056521	19239	920XC-30P SINGLE MODE OTDR, 1310/1490/1550nm ST/UPC
52056519	19237	920XC-30P SINGLE MODE OTDR, 1310/1490/1550nm SC/UPC
52056518	19252	920XC-30P SINGLE MODE OTDR, 1310/1490/1550nm FC/APC
52056517	19240	920XC-30P SINGLE MODE OTDR, 1310/1490/1550nm SC/APC
<b>TRI-WAVELENGTH 1310/1550/1625NM</b>		
52056515	19248	920XC-30F SINGLE MODE OTDR, 1310/1550/1625nm FC/UPC
52056516	19251	920XC-30F SINGLE MODE OTDR, 1310/1550/1625nm ST/UPC
52056514	19247	920XC-30F SINGLE MODE OTDR, 1310/1550/1625nm SC/UPC
52056513	19250	920XC-30F SINGLE MODE OTDR, 1310/1550/1625nm FC/APC
52056512	19249	920XC-30F SINGLE MODE OTDR, 1310/1550/1625nm SC/APC
<b>ACCESSORIES</b>		
52034541	20988	920XC CARRY CASE
52026957	20996	AC-CONN-FC-L2 FC CONNECTOR (For UPC & APC)
52026958	20997	AC-CONN-ST-L2 ST CONNECTOR (Only FOR UPC)
52026959	20998	AC-CONN-SC-L2 SC CONNECTOR (For UPC & APC)
52047065	25691	AC-ADPT-20-UNI POWER SUPPLY, UNIVERSAL
52042824	25692	Quick Reference Guide - UN
52034552	20999	NiMH Battery (9.6V)
52039299	10582	Car Adaptor

### SPECIFICATIONS

FIBRE TYPE	920XC-20C	920XC-30F	920XC-30P
Wavelength ( $\pm 20$ nm)	1310/1550	1310/1550/1625	1310/1490/1550
Dynamic Range (dB)	35	38	38
Event deadzone (m)	2.5	1.5	2.5
Attenuation Deadzone (m)	14	10	14
Emitter Type	Laser		
Pulsewidth (ns)	5, 10, 30, 100, 300, 1 $\mu$ s, 2.5 $\mu$ s, 10 $\mu$ s, 20 $\mu$ s		
Selectable Ranges (km)	0.3/1.3/2.5/5/10/20/40/80/120/160/240		
Average Time	15s/30s/1min/2min/3min		
Distance measurement accuracy	$\pm(1m + 5 \times 10^{-5} \times \text{distance} + \text{sampling space})$		
Connector Type	PC or APC (interchangeable FC, SC, ST)		
<b>VISUAL FAULT LOCATOR</b>			
Wavelength	650nm		n/a
Peak power output	3mW		n/a
Connector interface	(interchangeable FC, SC, ST)		n/a
<b>FIBRE ANALYSIS SOFTWARE</b>			
Reflection detect accuracy	$\pm 4$ dB		
Attenuation detect accuracy	$\pm 0.05$ dB/dB		
Measurement data storage	1,000 test curves		
Data transmission	RS-232/USB port		
<b>GENERAL</b>			
Power Supply	NiMH chargeable battery/AC adaptor		
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	1.9lbs. (0.87kg)		
Dimensions	7.7" H x 3.9" W x 2.4" L (196mm x 100mm x 64mm)		

## 920XC Singlemode & Multimode OTDR Kit



### FEATURES

- Combines 920XC SM and MM OTDRs in 1 kit
- 850/1300 & 1310/1550nm
- FC, ST and SC Adaptors included
- Compact handheld design
- Easy to use
- Fast automated testing
- Up to 22dB dynamic range on MM and up to 35dB range on SM
- Large backlight LCD display
- Measure length and defects on SM & MM fibre
- Fibre analysis software for data management and report generation
- RS-232/USB interface
- NiMH batteries for 8 hours continuous use

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
<b>SINGLE MODE &amp; MULTI-MODE KIT</b>		
52061806	26307	920XC - SM + MM KIT - (SM & MM OTDR Kit - UPC)
52061807		920XC - SM + MM KIT - (SM & MM OTDR Kit - APC)
<b>ACCESSORIES</b>		
52034541	20988	920XC CARRY CASE
52026957	20996	AC-CONN-FC-L2 FC CONNECTOR (For UPC & APC)
52026958	20997	AC-CONN-ST-L2 ST CONNECTOR (Only FOR UPC)
52026959	20998	AC-CONN-SC-L2 SC CONNECTOR (For UPC & APC)
52047065	25691	AC-ADPT-20-UNI POWER SUPPLY, UNIVERSAL
52042824	25692	Quick Reference Guide - UN
52034552	20999	NiMH Battery (9.6V)
52039299	10582	Car Adaptor

### SPECIFICATIONS

	920XC-20M	920XC-20C
Centre Wavelengths	Centre Wavelengths	Centre Wavelengths
Wavelength Tolerance	± 20nm	± 20nm
Dynamic Range (SNR = 1)	18dB / 22dB	35dB
Event Dead Zone	7m	2.5m
Emitter Type	LED	Laser
Attenuation Dead Zone	20m	14m
Pulse Widths	12, 30, 100, 275ns, 1, 2µs	5, 10, 30, 100, 300ns, 1, 2.5, 10, 20µs
Range Settings	0.1, 0.3, 0.5, 1.3, 2.5, 5, 10, 20, 40, 80km	0.3, 1.3, 2.5, 5, 10, 20, 40, 80, 120, 160, 240km
Averaging Time	15s/30s/1min/2min/3min	15s/30s/1min/2min/3min
Sampling Points	16,000 (maximum)	16,000 (maximum)
Min. Data Point Spacing	0.1m to 10m	0.1m to 15m
Group Index of Refraction (GIR)	Four digits after the decimal point between 1.0 and 2.0	Four digits after the decimal point between 1.0 and 2.0
Distance Measurement Accuracy (m)	± (1m + 5 x 10 <sup>5</sup> x distance + sampling space)	± (1m + 5 x 10 <sup>5</sup> x distance + sampling space)
Connector Type	PC (interchangeable FC, SC, ST) Included	PC or APC (interchangeable FC, SC, ST) Included
Attenuation Detect Accuracy	± 0.05dB/dB (typical)	± 0.05dB/dB (typical)
Trace File Format	.sor	.sor
Measurement Data Storage	1,000 test curves	1,000 test curves
Data Transmission	RS-232/USB port	RS-232/USB port
<b>VISUAL FAULT LOCATOR</b>		
Emitter		Laser
Wavelength		650nm
Output Power		3 mW(Peak)
<b>GENERAL SPECIFICATIONS</b>		
Size (in boot)	196mm x 100mm x 64mm (7.7" x 3.9" x 2.4")	196mm x 100mm x 64mm (7.7" x 3.9" x 2.4")
Weight	0.87kg (1.9lbs)	0.87kg (1.9lbs)
Operating Temperature	-10° to 50°C	-10° to 50°C
Storage Temperature	-20° to 60°C	-20° to 60°C
Relative Humidity	0 to 95% RH (non-condensing)	0 to 95% RH (non-condensing)
Power	NiMH Rechargeable battery/AC adaptor	NiMH chargeable battery/AC adaptor
Battery Life	Over 8 hours operating on one charge or > 20 hours Standby	Over 8 hours operating on one charge or > 20 hours Standby
Recharge Time	Quick charge takes 3 hours	Quick charge takes 3 hours



## MicrOTDR Optical Fault Locator

### FEATURES

- Measure cable length to 20km
- Singlemode and multimode operation
- Accurate identification of loss points/faults and length for SM & MM fibres
- Identify distance to 7 loss points/faults
- Distance accuracy of +/- 2 metres
- Check fibre reels for length and defects
- Troubleshoot installed fibre
- Easy to use
- Fast Operation (<6 seconds to find 6 optical events plus the end of fibre)
- Long battery life (13,000 tests on 4 AA batteries)
- ST output connection



### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50476633	47663	MICROTDR OPTICAL FAULT LOCATOR

SPECIFICATIONS	MicrOTDR
Centre Wavelengths	1310nm
Emitter Type	Laser (Class 1)
Connector Type	ST
Pulse Widths	200ns Typical
Pulse Rate	500kHz
Emitter Fibre Type	Multimode & Singlemode
Index of Refraction (IOR)	1.40 ~1.69
End of measurement Accuracy	$\pm 2\text{m} + \text{IOR Variation}$ (IOR Variation = 0.67m/km per.001 IOR error)
Minimum Distance Measured	30m
Dead Zone	30m
Maximum Distance Measured	20km
Minimum Detectable Signal @ 10km	-49dB
Number of Events Detected	7
Operating Temperature	-10° to 50°C
Storage Temperature	-20° to 60°C
Relative Humidity	0 to 95% RH (non-condensing)
<b>POWER</b>	
Battery Life (Alkaline)	13,000 tests
<b>PHYSICAL</b>	
Size	195mm x 100mm x 45mm (7.7" x 3.9" x 1.7")
Weight	0.44kg (0.9lbs)

## Optical Fibre Monitors



OFM1020



OFM130

### FEATURES

#### OFM1020

- mm Resolution
- Zero Deadzone
- 90dB Return loss dynamic range
- 850/1300nm operation
- Measure optical components, cables and sensors
- Monitor bend loss and fibre stress
- Universal optical interface
- Ruggedized for field deployment
- AC/DC operation
- Custom configurations available (fibre, outputs, wavelengths)

#### OFM130

- mm Resolution
- Zero Deadzone
- 85dB Return loss dynamic range
- 1310/1490/1550/1625nm operation
- Measure optical components, cables and sensors
- Analyze optical amplifiers
- Monitor bend loss and fibre stress
- Custom configurations available (fibre, outputs, wavelengths)

### ORDERING INFORMATION

CAT. NO.	UPC NO.	DESCRIPTION
OFM1020		Ruggedized Short Wavelength Hi-Res OTDR with Cal-Kit
OFM130		Long wavelength Hi-Res OTDR
TFM150		Tunable Hi-Res OTDR

### SPECIFICATIONS

Fibre Type	OFM1020	OFM130	TFM150
<b>DISTANCE</b>			
Range		0-20km (65,000ft.)	
Accuracy		0.02% + 2.5cm (1")	
Single Point Resolution		5mm (0.2")	
Two Point Resolution		10cm (4")	
<b>DEADZONE</b>			
Event		12cm typical (5")	
Attenuation		38cm typical (15")	
<b>RETURN LOSS</b>			
Dynamic Range	90dB		85dB
Accuracy		±1.0dB	
<b>INSERTION LOSS, FRESNEL</b>			
Dynamic Range	40dB		35dB
Accuracy		±0.3dB	
<b>INSERTION LOSS, RAYLEIGH</b>			
Dynamic Range	20dB		15dB
Accuracy		±0.02dB	
<b>WAVELENGTH</b>			
Accuracy	40nm	40nm	0.12nm
Spectral Width	20nm	20nm	<0.3nm
<b>MECHANICAL</b>			
Size	36cm x 48cm x 20cm (14.2" x 18.9" x 7.9")	35cm x 39cm x 20cm (13.8" x 15.3" x 7.9")	57cm x 47cm x 19cm (22.4" x 18.5" x 7.5")
Weight	11kg (24lb.)	9.5kg (21lb.)	16kg (36lb.)
<b>POWER</b>			
AC		110/220V, 60/400Hz	
DC	24V	n/a	n/a

# Optical Power Meters

## FEATURES

- 850, 1310, 1490, 1550nm calibrated wavelengths
- Referenced & Absolute optical power readings
- Stores up to 1000 measurements per wavelength
- Download results via USB (GRP460 only)
- Audible tone alert from incoming 2kHz signal
- Various connector options available
- NIST traceable measurements
- Multimode and Singlemode operation
- Long battery life
- Rugged and compact size
- Conversion to Live Fibre ID with GLFI 110

## ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52056202	GRP450-02	GERMANIUM, 0.01dB, ZERO/SET REF
52056203	GRP450-03	InGaAs, 0.1dB, ZERO/SET REF
52056204	GRP450-04	FILTERED InGaAs, 0.01dB, ZERO/SET REF
52056205	GRP455-02	GERMANIUM, 0.01dB, ZERO/SET REF
52056206	GRP455-03	InGaAs, 0.01dB, ZERO/SET REF
52056207	GRP455-04	FILTERED InGaAs, 0.01dB, ZERO/SET REF
52056208	GRP460-02	GERMANIUM, 0.01dB, ZERO/SET REF
52056209	GRP460-03	InGaAs, 0.01dB, ZERO/SET REF
52056210	GRP460-04	FILTERED InGaAs, 0.01dB, ZERO/SET REF

## CONNECTOR OPTIONS

52056231	GAC020	2.5mm UNIVERSAL ADAPTOR FOR OPM
52056232	GAC021	1.25mm UNIVERSAL ADAPTOR FOR OPM
52056233	GAC026	SC ADAPTOR FOR OPM
52056234	GAC027	ST ADAPTOR FOR OPM
52056235	GAC028	FC ADAPTOR FOR OPM
52056236	GAC029	LC ADAPTOR FOR OPM
52038126	-	SINGLE INSTRUMENT, BELT-MOUNTED CARRY POUCH

## SPECIFICATIONS

dB/dBm	GRP450-02	GRP450-03	GRP450-04
On-board storage	GRP455-02	GRP455-03	GRP455-04
Data transfer to PC	GRP460-02	GRP460-03	GRP460-04
Detector type	Ge	InGaAs	Filtered InGaAs
Wavelength range	850nm to 1625nm		
Measurement range	+ 3 to - 60dBm	+ 3 to -70dBm	+23 to -45dBm
Resolution	0.01dB		
Absolute accuracy*	+/- 0.25dB		
Optical interface	Universal 2.5mm (Order 1.25mm or screw on adaptors separately)		
Tone identification	2kHz Incoming signal, Audible Alert		
Power on	Push button ON, Auto shutoff		
Storage	Store up to 1000 measurements/wavelength GRP 455 & 460		
Data transfer	Mini USB Port (1000 points/wavelength) GRP 460 ONLY		
Dimensions	6.1 x .94 x .75in. (15.5 x 2.38 x 1.90cm)		
Weight	3.0oz (85g)		



Greenlee OPM Data Manager software is available for download from the dedicated Greenlee website at <http://minifibre.greenlee.com> (available for use with GRP460 OPM only)

Wavelength	Power	Loss	Gain	dBm	dB	dBm	dB
850	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1310	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1490	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1550	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Optical Light Sources

### FEATURES

- Multimode and Singlemode wavelength options
- Dual- and Single- Wavelength options
- FB version compatible with LC connectors
- Stable, calibrated output
- 2kHz Tone output
- NIST Traceable
- Long Battery Life
- Optional AC power supply adaptor for GDLS versions only (non CE)
- Rugged and compact size

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52060849	GDLS350FB	850/1300 DUAL LED (INCLUDES SC ADAPTOR)
52060850	GDLS355FB	1310/1550 DUAL LASER (INCLUDES SC ADAPTOR)
52060686	GDLS360FB	1490/1625 DUAL LASER SOURCE (INCLUDES SC ADAPTOR)
52056217	GDLS350	850/1300 DUAL LED (INCLUDES SC ADAPTOR)
52056218	GDLS355	1310/1550 DUAL LASER (INCLUDES SC ADAPTOR)
52056211	GTP210	850nm LED SOURCE - FIXED ST FEMALE
52056212	GTP215	850nm VCSEL SOURCE - FIXED SC MALE
52056213	GTP220	1310nm LASER SOURCE - FIXED SC MALE
52056214	GTP230	1300nm LED SOURCE - FIXED ST FEMALE
52056215	GTP240	1490nm LASER SOURCE - FIXED SC MALE
52056216	GTP250	1550nm LASER SOURCE - FIXED SC MALE

### CONNECTOR OPTIONS

52061736	GAC022B	SC ADAPTOR FOR FB VERSION
52061737	GAC023B	FC ADAPTOR FOR FB VERSION
52061738	GAC024B	ST ADAPTOR FOR FB VERSION
52061739	GAC025B	LC ADAPTOR FOR FB VERSION
52056237	GAC022	SC ADAPTOR FOR OLS - GDLS 350 & GDLS 355
52056238	GAC023	FC ADAPTOR FOR OLS - GDLS 350 & GDLS 355
52056239	GAC024	ST ADAPTOR FOR OLS - GDLS 350 & GDLS 355
52056245	GAC030	120V AC ADAPTOR FOR GTP200 AND GDLS300 SERIES
52046246	GAC031	240V AC ADAPTOR FOR GTP200 AND GDLS300 SERIES
52038126	-	SINGLE INSTRUMENT, BELT-MOUNTED CARRY POUCH

### SPECIFICATIONS

	GDLS350	GDLS355	GDLS360
Wavelength	850nm & 1300nm LED	1310nm & 1550nm Laser	1490nm & 1625nm Laser
Output Power	-20dBm Typ.	-4.0dBm Typ.	-4.0dBm Typ.
Laser Classification	N/A	Class 1 (FDA 21 CFR 1040, 11)	Class 1 (FDA 21 CFR 1040, 11)
Output Stability	+/- 0.05dB after 15 minutes, +/- 0.03dB after 1 hour warm-up		
Spectral Width	40nm/120nm	5nm/5nm	5nm/5nm
Optical Interface	Universal Connector Interface (FC, SC, ST & LC) - LC only on FB versions		
Tone Output	2kHz		
Power On	Push Button ON, Auto Shut-off		
Battery	CR 2 (battery charger available)		
Dimensions	6.1 x 0.94 x 0.75in (15.5 x 2.38 x 1.90cm)		
Weight	3 oz (85g)		
Operating Temperature	-10°C to 50°C		
Storage Temperature	-30°C to 60°C		



## Live Fibre Identifier

### FEATURES

- FTTx active OLT or ONT detection
- Snaps on to GRP 450, 455 or 460 Optical Power Meter
- Allows in service testing on Singlemode Networks
- Detects 2kHz tone from incoming signal generator GDLS355 and GDLS360
- Non invasive testing, will not place active channel in alarm condition
- Accepts 900  $\mu$ m, 2mm and 3mm jacketed SMF-28 and bend insensitive fibre

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52056249	GLFI 110	Live Fibre Identifier adaptor to be used with OPM (not supplied)

### SPECIFICATIONS

GLFI110 with	GRP460-02	GRP460-03
Network configuration	Singlemode Long Haul, CO to CO or FTTx	
Core Power Measurement Range	< 1.5dB @ 1550nm	
Induced Loss (SMF 28)	+ 3 to -70dBm	+23 to -45dBm
Absolute core power accuracy (SMF28e)	+/- 2dB within measurement range	
Tone identification	2kHz Incoming signal, Audible Alert	
Measurement Storage	Available when used with GRP 455 & 460	
Dimensions	4.0 x 1.5 x 1.5in. (10 x 1.25 x 1.25cm)	
Weight	2.0oz (6g)	

\* Accuracy measured at -10dBm and 25°C, all other specifications are @ 25°C.



Optical Power Meter to be ordered separately



## Video Inspection System - GVIS300



### FEATURES

- Unique external focus mechanism eliminates need for “focus wheel”
- ¾ µm scratch resolution
- Thin (less than 1” dia.) ergonomic probe design
- Quick change adaptor tips for all connector styles
- 3.5 inch (90mm) LCD Display
- FOV 630µm x 440µm
- Advanced Li Ion Battery & smart technology AC charger system
- Rugged and compact size
- 135 x magnification
- Optional GVCM410 USB 2.0 Video Capture Module for digital archiving of the image

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52066366	GVIS400HDP	GVIS400HDP PROBE WITH AUTO ANALYSIS SOFTWARE, CARRY CASE, 10 x 1.25mm SWABS, 10 x 2.5mm SWABS, CLEANING PEN AND SQUARE, 1.25mm, 2.5mm, SC AND LC ADAPTORS
52056253	GVIS300MP	GVIS 300 MONITOR & PROBE, 601C CARRY CASE, SC BULKHEAD AND 2.5mm UNIVERSAL ADAPTOR TIPS, BATTERY CHARGER, CLEANING PEN & SQUARE
52056254	GVIS300MP-USB	GVIS 300 MONITOR W/USB OPTION, PROBE, 601C CARRY CASE, SC BULKHEAD AND 2.5mm UNIVERSAL ADAPTOR TIPS, BATTERY CHARGER, CLEANING PEN & SQUARE
52056256	GVIS300P	GVIS 300 PROBE, 601C CARRY CASE, CARRY CASE, INSTRUCTIONS & 2.5mm UNIVERSAL ADAPTOR TIP
52056255	GVCM410	USB VIDEO CAPTURE MODULE (FOR USE WITH GVIS300P)

### ADAPTOR TIPS FOR GVIS PROBES

52066359	GAC034B	E2000 BULKHEAD ADAPTOR KIT
52056257	GAC040B	SC BULKHEAD
52056258	GAC041B	SC/APC BULKHEAD
52056259	GAC042B	FC BULKHEAD
52056261	GAC044B	LC BULKHEAD
52066360	GAC045B	LC/APC BULKHEAD ADAPTOR KIT
52056263	GAC046B	ST BULKHEAD
52056264	GAC047B	MTP MATING ADAPTOR
52056265	GAC048B	1.25mm CONNECTOR UNIVERSAL
52056266	GAC049B	2.5mm CONNECTOR UNIVERSAL
52060682	GAC100B	ODC PLUG TIP
52060683	GAC101B	ODC SOCKET TIP
52060684	GAC104B	60 DEGREE ANGLED FC
52060884	GAC107B	LC BULKHEAD, 60 DEGREE ANGLE
52060685	GAC109B	SC BULKHEAD, 60 DEGREE ANGLE
52064309	GAC175B	MTP/APC BULKHEAD ADAPTOR KIT
52064310	GAC176B	MTP/PC BULKHEAD ADAPTOR KIT

### SPECIFICATIONS

FOV (Field of View)	FOV 630µm x 440µm
Resolution	¾ micron
Light Source	Blue LED
Lighting Technique	Coaxial
Display screen size	3.5in (90mm) diagonal
Battery Life	8 to 10hrs continuous
Battery charge time	3 hours
Size	Probe – 180mm x 25mm x 19mm / Monitor – 120mm x 89mm x 32mm
Weight - (monitor, probe & case)	0.54kg
Operating Temp.	0° to 50 °C
Storage Temp.	-40°C to 70 °C



GVCM410

## Video Inspection System - GVIS400HDP (Digital Video Inspection)



### FEATURES

- High Definition Image
- Automatic or manual Pass/Fail analysis in accordance with IEC 61300-3-35
- Hands-free voice commands (with Windows Vista, 7 and above)
- Field of View 800µm x 600µm
- Magnify and centre
- USB connection to Laptop/PC
- Stream power measurements from GRP460
- Generate reports
- Digital archiving

### SPECIFICATIONS

FOV (Field of View)	Live - 800µm x 600µm Enlarge - 485µm x 365µm Magnify and centre - 485µm x 365µm
Resolution	<1 micron
Optical Magnification	135x, 200x
Camera type	HD Megapixel CMOS sensor
Pass/Fail analysis	User selectable or IEC 61300-3-35 software included
Focus control	External Focus System
Cord Length	44cm - 100cm
Connector	USB 2.0
Light Source	White LED
Lighting Technique	Coaxial
Size (Probe)	180mm x 25mm x 19mm
Weight (Probe)	102g

Greenlee GVIS Image Management Software (for use with the GVIS300 and GVIS400HDP Visual Inspection System) also allows for data streaming of OPM loss measurements (available for use with GRP460 OPM only)

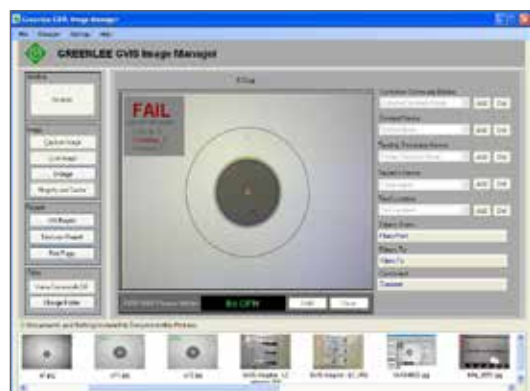


Figure 1 – Image showing automatic Pass/Fail analysis software



Figure 2 – Image showing manual analysis software

Greenlee Image Management System software being available for download from the dedicated Greenlee website at <http://minifibre.greenlee.com>

## Visual Fault Locator

### FEATURES

- Visibly locate near end faults
- 635nm red laser diode
- High Output 1mW
- 2Hz or CW operation
- Standard 2.5mm Universal Connector
- Rugged & compact size
- Long Battery life

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52056247	GVF610	Visual Fault Locator with CW and 2Hz modulated output (2.5mm Universal Connector)

Note: This product complies with 21 CFR 1040.10 & 1040.11

### SPECIFICATIONS

Wavelength	635nm
Optical Output Power	635nm Laser, 1mW FDA 2, IEC 2
Power On	ON/OFF Pushbutton
Battery	1000 operations, 3.0V, CR2
Low Battery	LED Indication
Modulation	2Hz modulation

### ENVIRONMENTAL

Operating Temperature	-10°C to + 55°C
Storage Temperature	-30°C to + 70°C
Weight	3.0oz (85g)
Physical	6.10in (15.5cm) H / 0.940in (2.38cm) W / 0.750in (1.90cm) D



## Instruments Designed for Fibre Optic Cable Testing

The XL fiberTOOLS™ are designed for the professional to perform installation and maintenance measurements on fibre optic cabling networks. The instrument family consists of individual devices (optical power meters, 850/1300nm LED sources, 1310/1550nm Laser sources, Visual Fault Locator) and complete Insertion Loss Test Sets. The XL fiberTOOLS™ are designed to accurately measure optical power levels and link loss on multimode and singlemode cabling networks. These full feature general purpose fibre optic instruments are easy to operate and economically priced to outfit all technicians performing fibre optic installation and maintenance.



### 560XL Fibre Optic Power Meter



#### FEATURES

- Easy to use - three buttons control all functions
- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements!
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors. See p.30 & 31 for other available adaptors
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

#### OPTICAL SPECIFICATIONS

Calibration Wavelengths	850nm, 1300nm, 1310nm and 1550nm	
Power Range	+3dBm to -60dBm	
Accuracy	±0.25dB	
Linearity at:	+3dBm to -3dBm	±0.5dB
	-3dBm to -50dBm	±0.05dB
	-50dBm to -60dBm	±0.5dB
Resolution	0.01dB	
Power Requirements	Two AA 1.5V batteries (approx. 100 hours continuous operation)	
Connector Interface	SOC	

#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

Refer to P25 for ordering information

## 567XL Silicon Fibre Optic Power Meter

### OPTICAL SPECIFICATIONS

Detector Type	3 x 3.5mm Silicon	
Calibration Wavelengths	635nm, 780nm, and 850nm	
Power Range	+3dBm to -60dBm	
Accuracy	±0.25dB	
Linearity at:	+3dBm to -3dBm	±0.5dB
	-3dBm to -50dBm	±0.05dB
	-50dBm to -60dBm	±0.5dB
Resolution	0.01dB	
Power Requirements	Two AA 1.5V batteries (approx. 100 hours continuous operation)	
Connector Interface	SOC	

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4



### FEATURES

- Easy to use - three buttons control all functions
- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements!
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors. See p.30 & 31 for other available adaptors
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced

## 568XL High Intensity Optic Power Meter

### FEATURES

- Easy to use - three buttons control all functions
- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements!
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors. See p.30 & 31 for other available adaptors
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced



### OPTICAL SPECIFICATIONS

Detector Type	2 mm Indium Gallium Arsenide (InGaAs)	
Calibration Wavelengths	980nm, 1310nm, and 1550nm	
Power Range	+25 to -30dBm (1310nm and 1550nm); +25 to -27dBm measurement range at 980nm. To avoid thermal damage, limit exposure high power (greater than +23dBm) to less than 30 minutes.; +25 to -27dBm (980nm only)	
Linearity at:	+25dBm to +22dBm	±1.0dB
(1310nm and 1550nm)	+22dBm to +18dBm	±0.5dB
	+18dBm to +10dBm	±0.2dB
	+10dBm to -30dBm	±0.05dB
Absolute Accuracy	±0.25dB at calibration conditions	
Wavelength Dependence	975 to 985nm	0.025dB/nm
	1270 to 1330nm	0.0033dB/nm
	1500 to 1625nm	0.0016dB/nm
Polarization Dependence	<0.1dB	
Resolution	±0.01dB	
Power Requirements	Two AA 1.5V batteries (approx. 100 hours continuous operation)	
Connector Interface	SOC	

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5 cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

Refer to P25 for ordering information



## 570XL 850/1300nm LED Source

### OPTICAL SPECIFICATIONS

Centre Wavelength	850nm	1300nm
Range (Typical)	840nm to 880nm	1270nm to 1345nm
Max. Spectral Width (FWHM)	55nm	150nm
Stability (1 hour)	±0.05dB	±0.05dB
Typical Power Output		
100/140um	-13dBm	-20dBm
62.5/125um	-13dBm	-20dBm
50/125um	-14dBm	-21dBm
Modulation Frequencies	270Hz, 1kHz and 2kHz	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 80 hours continuous operation)	Two AA 1.5V batteries (approx. 80 hours continuous operation)
Connector Interface	FC, SC or ST	FC, SC or ST



### FEATURES

- 850/1300nm wavelengths
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Fixed connector interface FC, SC or ST

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1:1992 IEC 801-2, -3, -4

## 580XL 1310/1550nm Laser Source



### OPTICAL SPECIFICATIONS

Centre Wavelength	1310nm	1550nm
Range (Typical)	1280nm to 1340nm	1520nm to 1580nm
Max. Spectral Width (FWHM)	<5nm	<5nm
Stability (1 hour)	±0.05dB	±0.05dB
Typical Power (9/125)		
Minimum	-8dBm	-8dBm
Typical	-7dBm	-7dBm
Modulation Frequencies	270Hz, 1kHz and 2kHz	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 80 hours continuous operation)	Two AA 1.5V batteries (approx. 80 hours continuous operation)
Connector Interface	FC, SC or ST	FC, SC or ST

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011 Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4
CDRH Laser Class	Class 1

### FEATURES

- 1310/1550nm wavelengths
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Fixed connector interface FC, SC or ST

Refer to P25 for ordering information

## 573XL 650nm LED Source for Large Core Plastic and Glass Fibre



### FEATURES

- 650nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Fixed ST and SOC Adaptor options are available

### OPTICAL SPECIFICATIONS

Centre Wavelength	650nm
Range (Typical)	630nm to 670nm
Max. Spectral Width (FWHM)	<40nm
Stability (1 hour)	±0.05dB
Power Output into MM 200/300 SI Fibre	-15dBm ±0.5dB
Modulation Frequencies	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 24hrs continuous operation)
Connector Interface	Fixed ST or SOC adaptor available

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## 577XL M90 850nm LED Source with M90 Launch Condition (62.5/125 Fibre)



### FEATURES

- 850nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- UCI Adaptor options are available

### OPTICAL SPECIFICATIONS

Centre Wavelength	850nm
Range (Typical)	840nm to 880nm
Max. Spectral Width (FWHM)	<55nm
Stability (1 hour)	±0.05dB
Launch Profile	M90
Power Output into MM 62.5/125 GI fibre	-13dBm ±0.5dB
Modulation Frequencies	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 24 hrs continuous operation)
Connector Interface	Universal connector interface, physical contact (UCI-PC)

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## 577XL AS100 850nm LED Source with AS-100 Launch Condition (100/140 Fibre)



### FEATURES

- 850nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- UCI Adaptor options are available

### OPTICAL SPECIFICATIONS

Centre Wavelength	850nm
Range (Typical)	840nm to 880nm
Max. Spectral Width (FWHM)	<55nm
Stability (1 hour)	±0.05dB
Launch Profile	AS100
Power Output into MM 100/140 GI fibre	-13dBm ±0.5dB
Modulation Frequencies	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 24 hours continuous operation)
Connector Interface	Universal connector interface, physical contact (UCI-PC)

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

Refer to P25 for ordering information

## 560XL-EMI Fibre Optic Power Meter with enhanced EMI Performance

**NEW**



### FEATURES

- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements!
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors. See p.30 & 31 for other available adaptors
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Engineered for use in areas with high electrical interference
- Enhanced EMI performance: MIL-STD-461E, Method RS103, tested to 190 V/m

### OPTICAL SPECIFICATIONS

Calibration Wavelength	850nm, 1300nm, 1310nm, and 1550nm
Power Range	+3 dBm to -60 dBm
Accuracy	±0.25dB
Linearity	
+3dBm to -3dBm	±0.5dB
-3dBm to -50dBm	±0.05dB
-50dBm to -60dBm	±0.5dB
Resolution	0.01dB
Power Requirements	Two AA 1.5V batteries (approx. 100hrs continuous operation)
Connector Interface	SOC

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% (non-condensing)
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## 570XL-AS100-EMI 850/1300nm LED Source with enhanced EMI Performance

**NEW**



### FEATURES

- 850nm / 1300nm wavelength LED Source
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Supports a wide range of UCI connectors, including FC, SC, and ST
- Configured to meet AS100 launch conditions
- Enhanced EMI performance: MIL-STD-461E, Method RS103 tested to 200 V/m

### OPTICAL SPECIFICATIONS

Centre Wavelengths	850nm	1300nm
Range (typical)	840nm to 880nm	1270nm to 1345nm
Max. spectral width	55nm	150nm
Stability (1 hour)	±0.05dB	±0.05dB
Typical power output		
100/140	-13dBm	-20dBm
62.5/125	-13dBm	-20dBm
50/125	-14dBm	-14dBm
Modulation frequencies	270Hz, 1kHz and 2kHz	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 80hrs continuous operation)	Two AA 1.5V batteries (approx. 80hrs continuous operation)
Connector Interface	UCI	UCI

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% (non-condensing)
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## 580XL-EMI 1310/1550nm Laser Source with enhanced EMI Performance

**NEW**



### FEATURES

- 1310nm/1550nm wavelength Laser Source
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 80 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Supports a wide range of UCI connectors, including FC, SC, and ST
- Enhanced EMI performance: MIL-STD-461E, Method RS103 tested to 200 V/m

### OPTICAL SPECIFICATIONS

Centre Wavelengths	1310nm	1550nm
Range (typical)	1280nm to 1340nm	1520nm to 1580nm
Max. spectral width	<5nm	<5nm
Stability (1 hour)	±0.05dB	±0.05dB
Typical power output (9/125)		
Minimum	-8dBm	-8dBm
Typical	-7dBm	-7dBm
Modulation frequencies	270Hz, 1kHz and 2kHz	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 80hrs continuous operation)	Two AA 1.5V batteries (approx. 80hrs continuous operation)
Connector Interface	UCI	UCI

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4
CDRH Laser Class	Class 1

## 5670XL Multimode Fibre Optic Test Set



### FEATURES

- Insertion loss test set for multimode fibre
- 850/1300nm loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy-to-use portable package
- Economically priced

### 5670-FC Includes

560XL	Optical Power Meter
570XL-FC	850/1300nm LED Source w/FC Connector
T1020	FC/PC SOC Adaptor
914B	Carrying Case

### 5670-SC Includes

560XL	Optical Power Meter
570XL-SC	850/1300nm LED Source w/SC Connector
1062	SC/PC SOC Adaptor
914B	Carrying Case

### 5670-ST Includes

560XL	Optical Power Meter
570XL-ST	850/1300nm LED Source w/ST Connector
T1030	ST/PC SOC Adaptor
914B	Carrying Case

## 5680XL Singlemode Fibre Optic Test Set



### FEATURES

- Insertion loss test set for singlemode fibre
- 1310/1550nm loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy-to-use portable package
- Economically priced

### 5680-FC Includes

560XL	Optical Power Meter
580XL-FC	1310/1550nm Laser Source w/FC Connector
T1020	FC/PC SOC Adaptor
914B	Carrying Case

### 5680-SC Includes

560XL	Optical Power Meter
580XL-SC	1310/1550nm Laser Source w/SC Connector
1062	SC/PC SOC Adaptor
914B	Carrying Case

### 5680-ST Includes

560XL	Optical Power Meter
580XL-ST	1310/1550nm Laser Source w/ST Connector
T1030	ST/PC SOC Adaptor
914B	Carrying Case

## 5890XL Multimode and Singlemode Fibre Optic Test Set



### FEATURES

- Insertion loss test set for multimode and singlemode fibre
- 850/1300nm Loss measurements
- 1310/1550nm Loss measurements
- Connector for FC, SC or ST
- Rugged package design
- Easy-to-use portable package
- Economically priced

### 5890-FC Includes

560XL	Optical Power Meter
570XL-FC	850/1300nm LED Source w/FC Connector
580XL-FC	1310/1550nm Laser Source w/FC Connector
T1020	FC/PC SOC Adaptor
915B	Carrying Case

### 5890-SC Includes

560XL	Optical Power Meter
570XL-SC	850/1300nm LED Source w/SC Connector
580XL-SC	1310/1550nm Laser Source w/SC Connector
1062	SC/PC SOC Adaptor
915B	Carrying Case

### 5890-ST Includes

560XL	Optical Power Meter
570XL-ST	850/1300nm LED Source w/ST Connector
580XL-ST	1310/1550nm Laser Source w/ST Connector
T1030	ST/PC SOC Adaptor
915B	Carrying Case

Refer to P25 for ordering information



## 170XL Visual Fault Locator

### FEATURES

- Continuous wave output mode for steady fault location
- Find breaks to 5km
- Blinking output mode increases viewing contrast
- Easy-to-use quick interface fits all 2.5mm connector interfaces (FC, SC, ST)
- 1.0mW output power
- Ergonomic rotary switch permits easy one-handed operation
- Rugged, compact and splash-proof aluminum design
- Two AA batteries provide 48 hours continuous operation
- Nylon belt holster included



### OPTICAL SPECIFICATIONS

Light Source Type	655nm Red laser Diode
Centre Wavelength	655nm
Range (Typical)	645nm to 655nm
Max. Spectral Width (FWHM)	<5nm
Power Output	
Max. into SMF-28 Fibre	1.0mW (0dBm)
Min. CW Output Mode	316µW (-5dBm)
Blink Frequencies in MOD mode	<3Hz approximate
Power Requirements	Two AA 1.5V batteries (approx. 48 hours continuous operation)
Connector Interface	Standard "Quick Connect" universal 2.5mm receptacle

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-10°C to +50°C
Storage Temperature	-40°C to +60°C
Humidity	0 to 95% non-condensing
Dimensions	Length: 22cm (9.0in.) Diameter: 2.54cm (1in.)
Weight	200g (7.0oz.)
CDRH Laser Class	Class IIIa
CE	IEC 60-1-2 portion of the EN50082-1 ESD immunity requirement EN50082-1: 1992 IEC 801-2, -3, -4

## 510XL SensoLITE™ Light Detector

Promotes workplace safety – can help prevent accidental eye exposure to hazardous laser radiation when used as directed.

### OPTICAL SPECIFICATIONS

Centre Wavelength	630nm to 1600nm
Detector	PIN-type germanium
Optical Interface	Direct connection to bare or connectorised fibres; No specialised adaptors required
Sensitivity	
630nm	< -40dBm
850nm	< -55dBm
1300nm	< -55dBm
1550nm	< -55dBm
Output Indicators	
Light > -40dBm	Amber LED/audible signal
Battery test	Green LED
Power Requirements	Two AA 1.5V batteries (approx. 100 hours continuous operation)

### FEATURES

- Detects visible and invisible light wavelengths (630nm to 1600nm)
- Saves time and eliminates guesswork
- Simple, durable, and easy to use
- Works with bare and connectorised fibres
- Accepts all fibre and most connector types
- Wide sensitivity range: from -55dBm to +25dBm
- Presence of light indicated by an audible signal and an illuminated front panel LED
- Unique design permits testing in bright ambient light conditions
- Long battery life - up to one year of normal use
- Low battery indicator
- Replaceable light blocking curtain

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-25°C to +70°C
Humidity	0 to 90% RH, non-condensing
Dimensions	14.2 x 4.3 x 3.3cm (5.6 x 1.7 x 1.3in.)
Weight	120g (4.2oz.) with batteries



## Snap On Connector (SOC) for Fibre Optic Power Meter

Snap On Connectors (SOC) are used on the 560XL Fibre Optic Power Meter. The Snap On Connectors configure the optical power meter for various optical connectors. Contact Greenlee for other available adaptors.

FC



T1020

ST



T1030

SC



T1062

FC



APC-108

SC



ASC-108

ST



AST-108

## Universal Connector Interface (UCI) for 577XL family

User will need to purchase a Universal Connector Interface (UCI) adaptor for use of the instrument. Please specify the desired connector adaptor type when ordering. Contact Greenlee for other available adaptors.



## CP-2976 & CP-3137 Silicon Fibre Optic Power Meter

### FEATURES

- Easy to use - three buttons control all functions
- Multi-Wavelength Storage: Store and recall reference power levels for faster, more efficient measurements!
- 0.01dB measurement resolution
- Loss measurements in (dB); power measurements in (dBm)
- Snap on connector interface adapts to FC, SC and ST connectors. See p.30 & 31 for other available adaptors
- Long battery life
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- CP-2976 calibrated at 660nm
- CP-3137 calibrated at 650nm



### OPTICAL SPECIFICATIONS

Detector Type	3 x 3.5mm Silicon	
Calibration Wavelengths	635nm, 780nm, and 850nm	
Power Range	+3dBm to -60dBm	
Accuracy	±0.25dB	
Linearity at:	+3dBm to -3dBm	±0.5dB
	-3dBm to -50dBm	±0.05dB
	-50dBm to -60dBm	±0.5dB
Resolution	0.01dB	
Power Requirements	Two AA 1.5V batteries (approx. 100 hours continuous operation)	
Connector Interface	SOC	

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## 573XL 650nm LED Source for Large Core Plastic and Glass Fibre

### FEATURES

- 650nm wavelength
- Stable calibrated output
- Easy to use
- Continuous wave and modulated output
- Long battery life - approx. 24 hours
- User selectable auto shut-off
- Rugged and splash-proof
- Economically priced
- Fixed ST and SOC Adaptor options are available



### OPTICAL SPECIFICATIONS

Centre Wavelength	650nm
Range (Typical)	630nm to 670nm
Max. Spectral Width (FWHM)	<40nm
Stability (1 hour)	±0.05dB
Power Output into MM 200/300 SI Fibre	-15dBm ±0.5dB
Modulation Frequencies	270Hz, 1kHz and 2kHz
Power Requirements	Two AA 1.5V batteries (approx. 24hrs continuous operation)
Connector Interface	Fixed ST or SOC adaptor available

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-15°C to +55°C
Storage Temperature	-35°C to +70°C
Humidity	0 to 95% non-condensing
Dimensions	7.2 x 14.2 x 3.5cm (2.8 x 5.6 x 1.4in.)
Weight	241g (8.5oz.)
CE	EN61010; EN50081-1:1992; EN55011, Group 1, Class A EN50082-1: 1992 IEC 801-2, -3, -4

## Ordering Information - XL fiberTOOLS™ Series

PART NO.	UPC NO.	DESCRIPTION
52022371	84501	170XL 635nm VISUAL FAULT LOCATOR
52058728	00024	510XL SENSOLITE™ LIGHT SENSOR
52022353	84485	560XL InGaAs OPTICAL POWER METER
52058723	00025	567XL SILICON FIBRE OPTIC POWER METER
52058724	00026	568XL HIGH INTENSITY OPTICAL POWER METER
52022355	84486	570XL-FC 850/1300nm LED SOURCE (FC)
52022356	84487	570XL-SC 850/1300nm LED SOURCE (SC)
52022357	84488	570XL-ST 850/1300nm LED SOURCE (ST)
52058784	00023	573XL 650nm LED SOURCE WITH FIXED ST CONNECTOR
52061770	00598	573XL 650nm LED SOURCE WITH SOC ADAPTOR INTERFACE
52058727	00029	577XL-AS100 850nm LED SOURCE WITH 100/400 LAUNCH CONDITION
52058726	00027	577XL-M90 850nm LED SOURCE WITH 62.5/125 LAUNCH CONDITION
52022358	84489	580XL-FC 1310/1550nm LASER SOURCE (FC)
52022359	84490	580XL-SC 1310/1550nm LASER SOURCE (SC)
52022360	84491	580XL-ST 1310/1500nm LASER SOURCE (ST)
52022361	84492	5670-FC MULTIMODE TEST SET (FC)
52022362	84493	5670-SC MULTIMODE TEST SET (SC)
52022363	84494	5670-ST MULTIMODE TEST SET (ST)
52022365	84495	5680-FC SINGLEMODE TEST SET (FC)
52022366	84496	5680-SC SINGLEMODE TEST SET (SC)
52022367	84497	5680-ST SINGLEMODE TEST SET (ST)
52022368	84498	5890-FC SINGLE/MULTIMODE TEST SET (FC)
52022369	84499	5890-SC SINGLE/MULTIMODE TEST SET (SC)
52022370	84500	5890-ST SINGLE/MULTIMODE TEST SET (ST)
52039994	21057	CP-2976 (567XL Calibrated at 660nm) HH OPM
52039998	12290	CP-3137 (567XL Calibrated at 650nm) HH OPM
52058804	00244	560XL-EMI InGaAs OPTICAL POWER METER
52058806	00245	570XL-EMI 850nm/1300nm LED SOURCE WITH AS100 LAUNCH CONDITION
52058805	00246	580XL-EMI 1310/1550nm LASER SOURCE

For SOC and UCI Adaptors see P30 & 31

## 525-30 Smart Optical Loss Test Set (Multimode)



### FEATURES

- Automated bi-directional testing
- Optical return loss measurements
- Dual wavelength insertion loss measurements
- User selectable Pass/Fail thresholds
- Communication between units via messaging
- Wide dynamic range
- Test record storage and data management software
- Rugged outside plant instrument package
- 850/1300nm wavelengths
- Stores 1000 measurement results

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
<b>52063292</b>		<b>525-30-FC - 850/1300nm Smart Optical Loss Test Set, FC Adaptor</b>
52040093	525N-30-PCX	FIBRE OPTICS TEST UNIT MM 850/1300
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	52ORSK	RS232 Adaptor AND CABLE / END
52039221	97-0525-30-01	CD AND MANUAL SUB ASSEMBLY
52039961	APC-108/C	UCI Adaptor, FC-APC WIDE KEY, CERAMIC SLEEVE
50605768	T1020	SOC Adaptor, FC
52034541	TBD	CANVAS CARRYING CASE
<b>52063293</b>		<b>525-30-SC - 850/1300nm Smart Optical Loss Test Set, SC Adaptor</b>
52040093	525N-30-PCX	FIBRE OPTICS TEST UNIT MM 850/1300
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	52ORSK	RS232 Adaptor AND CABLE / END
52039221	97-0525-30-01	CD AND MANUAL SUB ASSEMBLY
52039962	ASC-108/C	UCI Adaptor, SC-PC, CERAMIC SLEEVE
50605751	T1062	SOC Adaptor, SC
52034541	TBD	CANVAS CARRYING CASE
<b>52063294</b>		<b>525-30-ST - 850/1300nm Smart Optical Loss Test Set, ST Adaptor</b>
52040093	525N-30-PCX	FIBRE OPTICS TEST UNIT MM 850/1300
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	52ORSK	RS232 Adaptor AND CABLE / END
52039221	97-0525-30-01	CD AND MANUAL SUB ASSEMBLY
52039964	ATS-108/C	UCI, Adaptor, ST-PC, CERAMIC SLEEVE
50605775	T1030	SOC Adaptor, ST
52034541	TBD	CANVAS CARRYING CASE

### SPECIFICATIONS

#### AUTOTEST INSERTION LOSS

Test Port	
Measurement Range	25dB
Calibrated Wavelengths	850, 1300nm

#### GENERAL SPECIFICATIONS

Display Type	Graphics Liquid Crystal with Backlight
Fibre Type	Multimode 62.5/125µm
Standard Adaptor Type	FC, SC, ST or other adaptor options available
Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +60°C
Relative Humidity	0 to 95% RH non-condensing
Size	7.6 x 4.3 x 2.3in. (19.3 x 10.9 x 5.8cm)
Weight	2.2lbs. (1.0kg)
Power	Internal rechargeable NiMH
Battery Life	> 8 hours

#### POWER METER

Dector Type	InGaAs
Display Range	+10dBm to -70dBm
Calibrated Wavelengths	850, 980, 1300, 1310, 1550, 1480, 1625nm
Absolute Accuracy	<±0.25dB
Resolution	0.01dB
Measurement Units	dBm, dB, W

#### SOURCE

Centre Wavelength	850nm ±30nm	1300nm ±30nm
Spectral Width	<170nm	<170nm
Output Power	>-21dBm	>-21dBm
Output Stability	<±0.10dB/8hrs	<±0.10dB/8hrs
HOMP	0.03dB to 0.80dB	
Adaptor Type	UCI-APC flat polish adaptor 62.5/125µm MM	

## 525-60 Smart Optical Loss Test Set (Singlemode)



### FEATURES

- Automated bi-directional testing
- Optical return loss measurements
- Dual wavelength insertion loss measurements
- User selectable Pass/Fail thresholds
- Communication between units via messaging
- Wide dynamic range
- Test record storage and data management software
- Rugged outside plant instrument package
- 1310/1550nm wavelengths
- Stores 1000 measurement results
- One button AUTOTEST

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
<b>52063295</b>		<b>525-60-FC - 1310/1550nm Smart Optical Loss Test Set, FC Adaptor</b>
54040101	525N-60-PCX	FIBRE OPTIC TEST SET, RETURN LOSS PC INTERFACE
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	97-0525-60-01	CD AND MANUAL SUB ASSEMBLY
52039961	APC-108/C	UCI Adaptor, FC-APC WIDE KEY, CERAMIC SLEEVE
50605768	T1020	SOC Adaptor, FC
52034541	TBD	CANVAS CARRYING CASE
<b>52063296</b>		<b>525-60-SC - 1310/1550nm Smart Optical Loss Test Set, SC Adaptor</b>
54040101	525N-60-PCX	FIBRE OPTIC TEST SET, RETURN LOSS PC INTERFACE
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	97-0525-60-01	CD AND MANUAL SUB ASSEMBLY
52039962	ASC-108/C	UCI Adaptor, SC-PC, CERAMIC SLEEVE
50605751	T1062	SOC Adaptor, SC
52034541	TBD	CANVAS CARRYING CASE
<b>52063297</b>		<b>525-60-ST - 1310/1550nm Smart Optical Loss Test Set, ST Adaptor</b>
54040101	525N-60-PCX	FIBRE OPTIC TEST SET, RETURN LOSS PC INTERFACE
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	97-0525-60-01	CD AND MANUAL SUB ASSEMBLY
52039964	ATS-108/C	UCI, Adaptor, ST-PC, CERAMIC SLEEVE
50605775	T1030	SOC Adaptor, ST
52034541	TBD	CANVAS CARRYING CASE
<b>52063298</b>		<b>525-60RL-APC-FC - 1310/1550nm Smart Optical Loss Test Set APC+RL, FC Adaptor</b>
52040099	525N-60-APC-RLX	FIBRE OPTIC TEST SET, APC INTERFACE + RETURN LOSS
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	79-0525-04	CD ASSY, 525 REPORT WRITER
52040533	97-0525-14	MANUAL, USER, REPORT WRITER SOFTWARE
52040856	97-0525-20	ADDENDUM TO OPERATING MANUAL
52040535	97-0525-60	MANUAL, USER, 525N-60-XXX
52039961	APC-108/C	UCI Adaptor, FC-APC WIDE KEY, CERAMIC SLEEVE
50605768	T1020	SOC Adaptor, FC
52034541	TBD	CANVAS CARRYING CASE
<b>52063299</b>		<b>525-60RL-APC-SC - 1310/1550nm Smart Optical Loss Test Set APC+RL, SC Adaptor</b>
52040099	525N-60-APC-RLX	FIBRE OPTIC TEST SET, APC INTERFACE + RETURN LOSS
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	79-0525-04	CD ASSY, 525 REPORT WRITER
52040533	97-0525-14	MANUAL, USER, REPORT WRITER SOFTWARE
52040856	97-0525-20	ADDENDUM TO OPERATING MANUAL
52040535	97-0525-60	MANUAL, USER, 525N-60-XXX
52039962	ASC-108/C	UCI Adaptor, SC-APC, CERAMIC SLEEVE
50605751	T1062	SOC Adaptor, SC
52034541	TBD	CANVAS CARRYING CASE

Continued on P28

## 525-60 Smart Optical Loss Test Set (Continued)

### SPECIFICATIONS

	525-60-PCX		525-60RL-APC	
Instrument Type	Singlemode Smart Loss Test Set		Singlemode Smart Loss Test Set	
Interface Connector	PC Connector Interface		APC Connector Interface	
AUTOTEST measurements	AUTOTEST performs Insertion Loss Test and Manual Return Loss		AUTOTEST performs Insertion and Return Loss in one Test	
<b>POWER METER SPECIFICATIONS</b>				
Detector Type	InGaAs		InGaAs	
Display Range	+10dBm to -70dBm		+10dBm to -70dBm	
Calibrated Wavelengths	850, 980, 1300, 1310, 1550, 1480, 1625nm		850, 980, 1300, 1310, 1550, 1480, 1625nm	
Absolute Accuracy	±0.25dB		±0.25dB	
Resolution	0.01dB		0.01dB	
Measurement Units	dBm, dB, W		dBm, dB, W	
Adaptor Type	UCI-UPC flat polish adaptor 9/125µm SM		UCI-APC polish adaptor 9/125µm SM	
<b>SOURCE SPECIFICATIONS</b>				
Centre Wavelength	1310nm ±30nm	1550nm ±30nm	1310nm ±30nm	1550nm ±30nm
Spectral Width	<5nm	<5nm	<5nm	<5nm
Output Power	>-10dBm	>-10dBm	>-10dBm	>-10dBm
Output Stability	±0.15dB/ 8 hours	±0.15dB 8 hours	±0.15dB/ 8 hours	±0.15dB 8 hours
<b>AUTOTEST INSERTION LOSS SPECIFICATIONS</b>				
Test Port Measurement Range	40dB		40dB	
Calibrated Wavelengths	1310, 1550nm		1310, 1550nm	
<b>RETURN LOSS SPECIFICATIONS</b>				
Measurement Range	10 to 45dB		10 to 65dB	
Accuracy	0.5dB		0.5dB	
<b>GENERAL DESCRIPTIONS</b>				
Display Type	Graphics Liquid Crystal with Backlight		Graphics Liquid Crystal with Backlight	
Fibre Type	Singlemode 9/125µm		Singlemode 9/125µm	
Standard Adaptor Type	FC, SC, ST other adaptor options available		FC, SC, ST other adaptor options available	
Laser Classification	Class 1 CFR 1040		Class 1 CFR 1040	
Operating Temperature	0°C to +50°C		0°C to +50°C	
Storage Temperature	-20°C to +60°C		-20°C to +60°C	
Relative Humidity	0 to 95% RH non-condensing		0 to 95% RH non-condensing	
Size	19.3 x 10.9 x 5.8cm (7.6 x 4.3 x 2.3in)		19.3 x 10.9 x 5.8cm (7.6 x 4.3 x 2.3in)	
Weight	1.0kg (2.2lbs)		1.0kg (2.2lbs)	
Power	Internal rechargeable NiMH		Internal rechargeable NiMH	
Battery Life	>8 hours		>8 hours	



## 525-90 PON Optical Loss Test Set (Singlemode)



### FEATURES

- Automated Insertion/Return Loss measurements
- One button AUTOTEST
- Stores 1000 measurement results
- Cable acceptance software for report generation and fibre optic cable management
- Optical power meter
- Optical return loss meter
- Rechargeable batteries
- Rugged package for outside plant environment
- 2 wavelength options available:
  - 1310/1490/1550nm
  - 1310/1550/1625nm

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52063300		525-90-FC - 1310/1490/1550nm PON Optical Loss Test Set, FC Adaptor
52040083	525-90-RLX	BOM 525-90 -RLX 1310/1490/1550 OTS
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	79-0525-04	CD ASSY, 525 REPORT WRITER
52039961	APC-108/C	UCI Adaptor, FC-APC WIDE KEY, CERAMIC SLEEVE
50605768	T1020	SOC Adaptor, FC
52040871	97-0525-91	ERRATA FOR 525-90 MANUAL
52034541	TBD	CANVAS CARRYING CASE
52063301		525-90-SC - 1310/1490/1550nm PON Optical Loss Test Set, SC Adaptor
52040083	525-90-RLX	BOM 525-90 -RLX 1310/1490/1550 OTS
52039558	81-000004	AC POWER SUPPLY, 9V
50606871	90SOC	PULLER, SOC Adaptor, TOOL
52040053	520RSK	RS232 Adaptor AND CABLE / END
52037628	0934-27	MANDREL FIBRE WRAP
52039221	79-0525-04	CD ASSY, 525 REPORT WRITER
52039962	ASC-108/C	UCI Adaptor, SC-PC, CERAMIC SLEEVE
50605751	T1062	SOC Adaptor, SC
52040871	97-0525-91	ERRATA FOR 525-90 MANUAL
52034541	TBD	CANVAS CARRYING CASE

### SPECIFICATIONS

	525-90 (1490nm)		
<b>POWER METER</b>			
	1310nm/1490nm/1550nm		
Detector Type	InGaAs		
Display Range	+10dBm to -70dBm		
Calibrated Wavelengths	850, 980, 1300, 1310, 1490, 1550, 1625nm		
Absolute Accuracy	<±0.25dB		
Resolution	0.01dB		
Measurement Units	dBm, dB		
<b>SOURCE</b>			
Centre Wavelength	1310nm ±30nm	1490nm ±30nm	1550nm ±30nm
Spectral Width	<5nm	<5nm	<5nm
Output Power	>-10dBm	>-10dBm	>-10dBm
Output Stability	<±0.15dB/8hrs	<±0.15dB/8hrs	<±0.15dB/8hrs
Bulkhead Type	UCI-APC polish adaptor 9/125µm SM SOC Adaptor		
<b>AUTOTEST INSERTION LOSS</b>			
Test Port	40dB		
Measurement Range	Calibrated Wavelengths 1310, 1490, 1550nm		
<b>RETURN LOSS</b>			
Measurement Range	10 to 45dB		
Accuracy	0.5dB		

















### SPECIFICATIONS

	525-90 (1490nm)
<b>GENERAL SPECIFICATIONS</b>	
Display Type	Graphics Liquid Crystal with Backlight
Fibre Type	Singlemode 9/125µm
Standard Adaptor Type	FC, SC, ST other adaptor options available
Laser Classification	Class 1 CFR 1040
Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +60°C
Relative Humidity	0 to 95% RH non-condensing
Size	7.6 x 4.3 x 2.3in. (19.3 x 10.9 x 5.8cm)
Weight	1.0kg (2.2lbs)
Power	Internal rechargeable NiMH
Battery Life	8 hours

## Fibre Optic Instrument Adaptors – SOC and UCI

- Our SOC and UCI adaptors provide direct connectivity for Greenlee Communications fiberTOOLS® to a wide range of industry-standard fibre optic connectors
- Adaptor design ensures maximum accuracy and repeatability when performing critical measurements on fibre optic systems
- Easy to clean and use
- Single-mode and multimode compatible
- SOC adaptors are compatible with both PC and APC interfaces
- UCI adaptors feature durable phosphor bronze alignment sleeve

## Fibre Optic Instrument Adaptors – SOC and UCI

CONNECTOR TYPE	SOC ADAPTOR		UCI ADAPTOR		
	DESCRIPTION	PART NO.	CAT. NO.	PART NO.	CAT. NO.
1.25 mm Quick-Connect Universal Adaptor (LC, MU, etc.)		50605881	T1026	Use hybrid cable only*	
2.5 mm SOC Quick-Connect Adaptor		50605874	T1025		50607038 AU-250
E-2000		50605997	T10E2		50606987 AE2-10
FC		50605768	T1020		50605720 APC-108 52039961 APC-108C
LC		50606000	T10LC	Use hybrid cable only* or FoPro®**	
MIL-T-29504/4 & /5 Termini		50605898	T1038	Use hybrid cable only* or FoPro®**	
MT-RJ		50606055	T13A2***	Use hybrid cable only*	
SC		50605751	T1062		50605744 ASC-108
SMA 905/906		50605966	T1087		50607021 ASM-90
ST		50605775	T1030		50605737 ATS-108

## Fibre Optic Instrument Adaptors – SOC and UCI

CONNECTOR TYPE	SOC ADAPTOR		UPI-PC ADAPTOR		
	DESCRIPTION	PART NO.	CAT. NO.	PART NO.	CAT. NO.
TOSLINK – Simplex		50606024	T10TB	Use hybrid cable only*	
TOSLINK – Duplex (Set of 2)		50606031	T10TD	Use hybrid cable only*	
Versatile Link – V/Z PIN		50606048	T10ZP	Use hybrid cable only*	
SMA 905/906		52037781	T1087-POF	N/A	
ST		52040191	T1030-POF	N/A	
FC Mating Adaptor (FC/PC and APC)		50107895	MPC-108	N/A	
SC Mating Adaptor (SC/PC)		50107879	MSC-S0	N/A	

\* When using a Hybrid Adaptor Cable, the UCI adaptor and one end of the Hybrid Adaptor Cable should be a commonly available connector type. (i.e. FC, SC or ST)

\*\* FoPro ferrule options include 2.5mm, 1.57mm (MIL-style 16AWG optical contacts) and 1.25mm

\*\*\* SOC adaptor for use only with the 556MT Optical Power Meter



50606871 (90SOC) Adaptor

Refer to P43-44 for SOC & UCI Adaptor Cleaning Wands

## TIA-568B & FOTP-171A Certified Reference Cables



572J

### FEATURES

Ensures accurate measurements for repeatable and reproducible testing to the latest industry standards.

Meets and/or exceeds the latest industry standards including:

- TIA/EIA-455-171 (FOTP-171A), issued June 2001
- TIA-568B, TIA-562-7 (OFSTP-7) and TIA-526-14 (OFSTP-14) for optical link testing
- TIA-455-171 (FOTP-171, Attenuation) and TIA-455-8 (FOTP-8, Return Loss) for cable assembly testing
- Corresponding IEC measurement standards

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
<b>SM STANDARD REFERENCE CABLES TYPE A TO TYPE B</b>		
50606581	60658	562K-101 REFCAB, SM FC PC
50606611	60661	563K-101 REFCAB, SM ST PC
50606642	60664	566K-101 REFCAB, SM SC PC
50606673	60667	56E2-101 REFCAB, SM E2000PC
50606703	60670	56LC-LSM REF CABLE, LC-PC X2 SM MINICORD
50606765	60676	56MU-LSM REFCAB, MU-PC X2 SM MINICORD
<b>MM STANDARD REFERENCE CABLES TYPE A TO TYPE B (50/125)</b>		
50606598	60659	562K-105 REFCAB, MM50 FCPC
50606628	60662	563K-105 REFCAB, MM50 STPC
50606659	60665	566K-105 REFCAB, MM50 SCPC
50606680	60668	56E2-105 REFCAB, MM50 E2000PC
50606710	60671	56LC-LM5 REFCAB, MM50 LCPC
<b>MM STANDARD REFERENCE CABLES TYPE A TO TYPE B (62.5/125)</b>		
50606604	60660	562K-106 REFCAB, MM62.5 FCPC
50606635	60663	563K-106 REFCAB, MM62.5 STPC
50606666	60666	566K-106 REFCAB, MM62.5 SCPC
50606697	60669	56E2-106 REFCAB, MM62.5 E2000PC
50606727	60672	56LC-LM6 REFCAB, MM62.5 LCPC
<b>M HYBRID REFERENCE CABLES (FC-PC TO TYPE A)</b>		
50606802	60680	572J-101 RC, SM FCPC-FCAPC
50606819	60681	576J-101 RC, SM FCPC-SCAPC
50606826	60682	57E8-101 RC, SM FCPC-E2000APC
50607335	60733	57LC-LSM RC, SM FCPC-LCPC
50607366	60736	57MU-LFM RC, SM FCPC-MUPC
<b>MM HYBRID REFERENCE CABLES (FC-PC TO TYPE A - 50/125)</b>		
50607342	60734	57LC-LM5 RC, MM50 FCPC-LCPC
50607373	60737	57MU-LM5 RC, MM50 FCPC-MUPC
<b>MM HYBRID REFERENCE CABLES (FC-PC TO TYPE A - 62.5/125)</b>		
50607359	60735	57LC-LM6 RC, MM62.5 FCPC-LCPC
50607380	60738	57MU-LM6 RC, MM62.5 FCPC-MUPC

### SPECIFICATIONS

Ferrule OD	2.4990 ±0.0005mm
Fibre to Ferrule Eccentricity	≤ 0.25µm (SM) and ≤ 3µm (MM)
Insertion Loss	≤ 0.15dB (SM, 1310/1550nm) and ≤ 0.25dB (MM, 850/1300nm)
Return Loss	≥ 55dB (SM, 1310/1550nm) and ≥ 40dB (MM, 850/1300nm)
Beam Exit Angle	≤ 0.25° (SM) and ≤ 0.5° (MM)
Standard Length	3m

## fiberTOOLS™ Hard Carry Case



### FEATURES

Designed to hold Greenlee handheld instruments and a full range of test accessories.

#### 900B and 901B Hard Carrying Cases

- Top tray holds up to 3 (900B) or 4 (901B) handheld instruments and a 170XL Visual Fault Finder
- Bottom compartment of both models stores additional instruments and test accessories
- Compact, waterproof and lockable
- Molded from black structural foam resin

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
50606840	900B	CARRY CASE RUGGEDISED 3 UNIT
50606857	901B	CARRY CASE RUGGEDISED 4 UNIT

## Hard Carry Case



### FEATURES

Recommended Option for GVIS Video Inspection System.

#### Hard Carry Case

- Foam inlay for added instrument protection

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52063091	-	Hard Carry Case

### SPECIFICATIONS

42 x 30 x 10cms

## Deluxe Carrying Cases



Carry Case only

### FEATURES

Designed to hold Greenlee Mini Fibre Tools (GMFT) and accessories.

#### Deluxe Carry Case

- Can hold up to 5 Instruments (Power Meters/Sources/VFL)
- For use with GMFT
- Pockets for accessory and cleaning material storage
- Compact and lightweight
- Shoulder strap

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52057086	-	Deluxe Carry Case



## fiberTOOLS™ Carrying Cases



Carry Case only

### FEATURES

Designed to hold Greenlee handheld instruments and full range of test accessories.

#### 914B and 915B Soft Carry Cases

- 2 or 3 instrument versions
- Zip-able pocket for accessory storage
- Compact and lightweight
- Shoulder strap

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52039678	914B	2 INSTRUMENT CARRY CASE
52039680	915B	3 INSTRUMENT CARRY CASE

## Soft Carry Case



Carry Case only

### FEATURES

Designed to hold a variety of Greenlee OTDRs, Fibre Testers, Tools and accessories.

#### 920C Soft Carry Case

- Suitable for multiple instrument storage
- Can hold up to 2 OTDRs and accessories
- Pockets for accessory and cleaning material storage
- Compact and lightweight
- Shoulder strap

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52034541	920C	Soft Carry Case

## ProGrip 5-in-1 Fibre Optic Stripper



### FEATURES

- Precision ground stripping cavities for:
  - 2.0 - 2.4mm outer jacket
  - 2.0 - 3.0mm loose tube
  - 2.8 - 3.0mm outer jacket
  - 900µm buffer insulation
  - 900/125µm and 250/125µm buffer/acrylate
- Factory calibrated
- Dual-durometer ProGrips for improved comfort and control

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52055935	PA1171	PRO-GRIP STRIPPER, 5-IN-1 FIBRE OPTIC

## ProGrip 3-in-1 Fibre Optic Stripper



### FEATURES

- Precision ground stripping cavities for:
  - 2.0mm outer jacket
  - 900µm buffer insulation
  - 250µm buffer/acrylate
- Factory calibrated
- Dual-durometer ProGrips for improved comfort and control

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52055938	PA1177	PRO-GRIP STRIPPER, 3-IN-1 FIBRE OPTIC

## Pro-Plus Wire Stripper



### FEATURES

- Strips both solid and stranded wires.
- Precision ground blades ensure consistent stripping and cutting.
- Ergonomically designed, extra long handles for superior comfort and assured grip.
- Heat treated for strength with black oxide finish for rust resistance.
- Serrated nose pliers for bending, pulling, and shaping wire.
- Lock tab protects cutting edges during storage.
- Cleanly cuts #6-32 and #8-32 screws.
- Note: this is not an insulated tool.
- Lifetime limited warranty.
- 10-18 Solid AWG
- 12-20 Stranded AWG

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52056546	12368	STRIPPER WIRE (1955A) (POP)

## Economy Kevlar® Cutter



### FEATURES

- Cut protective Kevlar® strands in fibre optic cable
- Hard-chromed serrated edges to easily cut through Kevlar®
- Comfortable handles with large finger openings

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52051283	PA1511	CUTTER Kevlar®

Kevlar® is a registered trademark of E.I. DuPont, Inc.

### SPECIFICATIONS

Weight	2oz. (57g)
Length	7.75" (197mm)

## Economy Fibre Optic Stripper



### FEATURES

- Pre-calibrated and factory set to ensure precision
- Bright orange rubber dipped handles
- Lock closure for safety and transport
- Strips 2.0 to 3.0mm fibre jacket, 900µm buffer and 25µm acrylate
- Spring loaded closure with distance stops

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52050605	PA1162	STRIPPER FIBRE OPTIC 3-LEVEL RETAIL

### SPECIFICATIONS

Weight	3oz. (86g)
Length	5" (127mm)

## Pocket Cable Stripper



### FEATURES

- Specifically designed for stripping power and telecommunications cables from 3/4" to 1-1/2" in diameter (19mm to 40mm)
- Strips solid conductor, stranded conductor and multiple conductor cables.
- Easy blade depth adjustment
- Blade rotates for circular, longitudinal and spiral cuts

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52040895	1903	POCKET CABLE STRIPPER
50079158	07915	CUTTING BLADES (PACK OF 2)

### SPECIFICATIONS

Weight	0.25lbs (0.1g)
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## Universal Slitter



### FEATURES

- Strips and slits 0.18" to 1.0" (4.5-25mm) diameter Round Cables
- Precision stripping and slitting of rubber, PVC, nylon and most insulation materials
- Adjustable depth of cut
- Circumferential, longitudinal and spiral cuts
- Cable is supported during use
- Cable support arm edge is used to pry off thick insulation
- Laser-trimmed, stainless-steel blade for long use
- A perfect tool for mid-point taps
- Spare blade included

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52050604	PA1822	SLITTER CABLE 0.18-1.40 INCH CLAMSHELL
52050563	PA2109	REPLACEMENT BLADE (QTY 2)

### SPECIFICATIONS

Weight	7 oz. (200g)
Length	5.7" (145mm)

## Round Cable Cutters



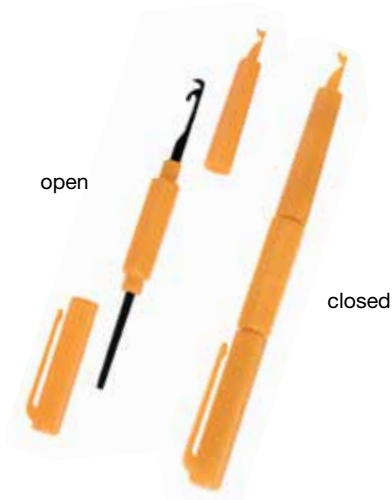
### FEATURES

- To cut fibre outer cable jacket
- Cuts solid or stranded cable up to AWG 6
- Precise and effortless cuts
- Round cutting form minimises cable deformation
- Both are ideal for UTP and Coax, RG58, RG59 and RG6/6Q; Use PA1175 for RG7 and RG11

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52055936	PA1175	PRO-GRIP CUTTER, CONTOUR CABLE CUTTER
52055940	PA1179	PRO-GRIP CUTTER, DUAL CONTOUR CABLE CUTTER

## Pocket Probe Pick



### FEATURES

Probe pick for pulling wire, slicing, stripping cable and cleaning debris off terminal panels. Small and lightweight. Pen-sized with clip for carrying in pocket.

- Spudger tip
- Wire hook
- Wire stripper and slitting tooth
- Non-conductive scraping tip

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52049188	PA1915	POCKET PROBE / PICK BLISTER

### SPECIFICATIONS

Weight	3oz. (86g)
Overall Length	6.5" (166mm)

## Ultimate Fibre Tool Kit

### FEATURES

This Ultimate Kit contains all the slitters, strippers, and Kevlar® cutters you will need to start your fibre optic terminations. Also included is the premium 1600 Series Crimper with 3 interchangeable dies. The Ultimate Tool Bag has plenty of room for you to add your consumables.

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52050427	PA4924	ULTIMATE FIBRE TOOL KIT

### SPECIFICATIONS

Dimensions	10.5" W x 10.5" L x 9.5" D 267mm W x 267mm L x 241mm D
Weight	5.65lbs. (2.56Kg)

### ULTIMATE FIBRE TOOL KIT INCLUDES

PA1511	Kevlar® Cutter
PA1171	ProGrip 5-in-1 Fibre Optic Stripper
PA1162	Economy Fibre Optic Stripper
PA1161	Adjustable Jacket Stripper
PA1820	AM 25 Slitter
PA1821	AM 35 Slitter
PA1258	LC CST-mini Stripper
PA1600	1600 Series Crimp Frame
PA2044	STII Type Die Set
PA2664	SMA/SMB/FC/BICONIC Die Set
PA2668	SC & ST Die Set
PA1922-1	Fibre Optic Scribe
PA1920-1	SC/ST/FC Polishing Puck
PA1926-1	LC Polishing Puck
N/A	Plano® Tackle Box
PA4923	Ultimate Tool Bag



## FiberReady Tool Kit

### FEATURES

This kit contains an assortment of cable slitters, strippers and Kevlar® cutters to prep fibre optic cable along with our 1600 Series premium crimper with interchangeable dies.

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52050428	PA906001	FIBERREADY TOOL KIT FIBRE TOOL KIT

### SPECIFICATIONS

Dimensions	11.7 "W x 8.2" L x 3.3" D 297mm W x 208mm L x 84mm D
Weight	3.1lbs. (1.41Kg)

### FIBERREADY TOOL KIT INCLUDES

PA1511	Kevlar® Cutter
PA1171	ProGrip 5-in-1 Fibre Optic Stripper
PA1822	Universal Cable Stripper
PA1600	1600 Series Crimp Frame
PA2044	STII Type Die Set
PA2664	SMA/SMB/FC/BICONIC Die Set
PA2668	SC & ST Die Set
N/A	Zippered Portfolio Case with Handles



Kevlar® is a registered trademark of E.I. DuPont, Inc.



## Fibre Optic Termination Kit



### FEATURES

- Contains all of the tools and consumable materials necessary for epoxy and polish connector terminations
- Durable Cordura® Plus carrying case protects and organizes tools and includes see-through pouches for storing connectors
- Outside pockets provide convenient storage of instruction manuals or worksite documents

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50456580	45658	FIBRE OPTIC TERMINATION KIT

### KIT CONTENTS

#### KIT CONTENTS MAY BE PURCHASED SEPERATELY:

PA1511	Fibre Optic Kevlar® Cutter
PA1177	3-in-1 Fibre Optic Stripper
PA1922	Fibre Optic Carbide Tipped Scribe
1955A	Pro-Plus Wire Stripper, 10-18 Solid AWG
45637	Kwik Cycle® 8" Crimp Frame with 0.151", 0.178", 0.213" Hex Cavities
45599	Stainless Steel Polishing Puck
45612	Resilient Polishing Pad, 3" x 8" (7.6 x 203.2mm)
45651	Fibre Optic Inspection Microscope
45639	Carry Case

#### Kit includes the following consumable items which are not sold separately:

50 Sheets Polishing Paper, 0.3 micron	100 Lint-free Wipes
50 Sheets Polishing Paper, 1 micron	10 Alcohol Wipes
50 Sheets Polishing Paper, 5 micron	1 Alcohol Bottle
10 ml (0.34 oz.) Opticure Adhesive	1 Water Bottle
26 ml (0.9 oz.) Opticure Primer	1 Fibre Debris Disposal Container
1 Pair Safety Glasses	10 Syringes
1 Plastic Utility Box	10 Needle Tips
1 Felt-tipped Marker	

## Introduction

Greenlee Communications Ltd is pleased to be partnering with ITW Chemtronics® to provide cleaning products which compliment our test equipment and provide a complete solution for the installation and maintenance of fibre networks, covering requirements to Inspect, Clean & Test.

FOCCUS™ - Fibre Optic Combination Cleaning Universal Systems™ – Why is it Important?

Over the last decade we have not only seen an increasing demand for speed of transmission but also a requirement for delivery of larger and larger amounts of data. Rapidly growing demand for high speed internet access, Home Entertainment, IPTV, HD and gaming is adding to the increasing bandwidth requirements of business transmissions and back-haul for mobile transmission. More and more, this is being supported by fibre as the fastest transmission media.

However, the fastest link is also the potential weakest link. Soiled connections or those that are not cleaned effectively can reduce transmission speeds.

Precision cleaning a fibre optic connection is the first step to network reliability and ultimately customer satisfaction. If there is a weak link in a fibre optic network or installation it is likely to be the condition of the end-face of the fibre connector as the signal passes through it.

There are a wide range of potential contaminants or soils that can cause problems on a fibre end-face – not all contaminants are simply dust. These contaminants can extend to the vertical part of the ferrule and can migrate to the contact area where the fibre connectors mate.

What you need is a simple, repeatable cleaning method that removes all potential soils quickly and effectively.

This is provided by the Combination Cleaning Process™, which uses a small amount of precision solvent and automatically dries the end face as an integral part of the cleaning operation. The high-reliability, first time cleaning of the Combination Cleaning Process™ provides a safety net for the installer.

### The Significance of Solvent Selection:

- The best selection is one that cleans the widest range of soils – not just dust
- The best performing cleaning solvents are precision hydrocarbons such as Electro-Wash™ “PX” or “MX”. A solvent based on HFE7100 and IPA is not as effective
- Even 99.9% proof IPA does not remove all soils – it is chemically disadvantaged
- The future of global precision cleaning may be an Aqueous Cleaner such as Fiber-Wash™ (which is patented)

## Cleaning Kits



Kit contents will vary – please see information provided below

### CFK1013 I&M Cleaning Kit

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52061805	CFK1013	I&M CLEANING KIT

**CFK1013** – Installation and Maintenance of 2.5mm connections for all operations. Contains 1 QbE® Cleaning Platform, 2 Electro-Wash® MX Precision Cleaning Pens, 1 tube of 50 x 2.5mm Swabs with X'Tenders™, 5 Electro-Wash® MX pre-saturated universal cleaning wipes for gel removal and tool cleaning, strong non-paper lint-free Wipers, Instructions and Carry Case.

### CFK1003 Construction Kit (for fusion splicing applications)

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52063012	CFK1003	CONSTRUCTION KIT (for fusion splicing applications)

**CFK1003** – Includes all products necessary to clean fusion splicers and fibre optic connectors and cables. The precision hydrocarbon cleaning solvent included in the kit may improve electrode life. Contains 1 QbE® Cleaning Platform, 2 Electro-Wash® MX Precision Cleaning Pens, 1 tube of 50 x V-Groove and Ferrule Cleaning Swabs, 1 tube of 50 x 2.5mm Swabs with X'Tenders™, 1 x Fusion Splice Mirror Cleaning Swabs, 5 Electro-Wash® MX pre-saturated universal cleaning wipes for gel removal and tool cleaning, strong non-paper lint-free Wipers, Instructions and Carry Case.

### CFK-1202 FTTx Cleaning Kit

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52063013	CFK1202	FTTX CLEANING KIT

**CFK1202** – For FTTx applications – Includes swabs, wipes and cleaning solvents for ALL end face cleaning needs. The pQbE™ platform cleans SC/LC (UPC and APC), MTP® type, Corning® OptiFit® and E2000 Geometry connectors. Contains 1 pQbE® Cleaning Platform, 2 Electro-Wash® MX Precision Cleaning Pens, 2 tubes of 2.5mm Swabs with X'Tenders™, 1 tube of 50 x 1.25mm Precision Swab Tools, 1 tube of 25 “MT” Type Swab Tools, 5 Electro-Wash® MX pre-saturated universal cleaning wipes for gel removal and tool cleaning, 1 bag of 100 strong non-paper, lint-free Wipers, Instructions and Carry Case.

### CCK-01 Combination Cleaning™ Kit

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52060687	CCK-01	COMBINATION CLEANING™ KIT CONTAINS 1 MX PEN AND 1 SqR™

**CCK-01** – Combination Cleaning™ “To-go”. The compact Kit includes both cleaning solvent and platform, which fits easily into a tool box, equipment case or pocket.

### CCK-03 Combination Cleaning™ Kit

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52060963	CCK-03	COMBINATION CLEANING™ KIT CONTAINS 1 MX PEN, 1 SqR™ AND 2.5mm SWABS

**CCK-03** – Compact and portable kit – includes swabs, wipes and solvent for end face cleaning

## Connector Cleaning Platforms - Portable and efficient, offer more complete removal of microscopic contaminants



### QbE® Cleaning Platform - Large, flat continuous FiberSafe™ cleaning platen

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52061801	QbE	CLEANING PLATFORM

**QbE®** - The original device for the Combination Cleaning Process™. To be used with the Electro-Wash® MX Pen or Fiber-Wash™ Pen, the QbE® has the largest cleaning surface of any fibre optic cleaning platform. 200 wipes can clean up to 800 end faces using the Combination Cleaning Process™.

### pQbE® Cleaning Platform - Precision wipe platform for cleaning recessed fibre optic end faces

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52061802	pQbE	CLEANING PLATFORM

**pQbE®** - Combination Cleaning Process™ - use with Electro-Wash® MX Pen or Fiber-Wash™ Pen. The see through package shows the remaining wipes, whilst the water-proof packaging is weather resistant, is pocket sized and includes a convenient clip to attach a tool belt.

For FTTX applications, the pQbE's unique platen enables cleaning of the vertical as well as the end-face of the ferrule and will clean SC/LC (UPC and APC), MT-type, Optifit® and E-2000 end-faces.

Raised, ridged FiberSafe™ cleaning platen, conforms to recessed connectors end face. Contains 200 wipes.

### QbE®-QS Aqueous Cleaning Platform - Includes an easy-to-use, integrated cleaning solvent

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52063014	QbE-QS	CLEANING PLATFORM

**QbE®-QS** - Includes an easy-to-use, integrated cleaning solvent – the Fiber-Wash™ Aqueous Cleaner works as well as precision hydrocarbons on a wide range of contaminants. Includes an on-board moistening system, with the Fiber-Wash™ Aqueous Cleaner. Contains 200 wipes.

### QbE®-2 Cleaning Platform - Precision wipe platform for fibre optic end faces

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52066140	QbE-2	200 WIPE CLEANING PLATFORM

**QbE®-2** - Combination Cleaning Process™ - use with Electro-Wash® MX Pen or Fiber-Wash™ Pen. The see through package shows the remaining wipes, whilst the water-proof packaging is weather resistant, is pocket sized and includes a convenient clip to attach a tool belt. Contains 200 wipes.

## Cleaning Pens



### Electro-Wash® MX Precision Cleaning Pen

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52061803	FW2150	ELECTRO-WASH® MX PRECISION CLEANING PEN

A high-performance precision hydrocarbon, which outperforms most HFE-7100 solvents cleaning the widest range of contaminants, with approximately 300 applications (<1ml) per pen.



### Fiber-Wash™ Aqueous Fibre Optic Cleaning Pen

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52061804	FW2190	AQUEOUS FIBRE OPTIC CLEANING PEN

Works as well as the precision hydrocarbon MX Pen on a wide range of contaminants, with approximately 300 applications (<1ml) per pen.

## Cleaning Wipes

### FSA Splice Wipes (Aqueous) - Impregnated lint free wipes

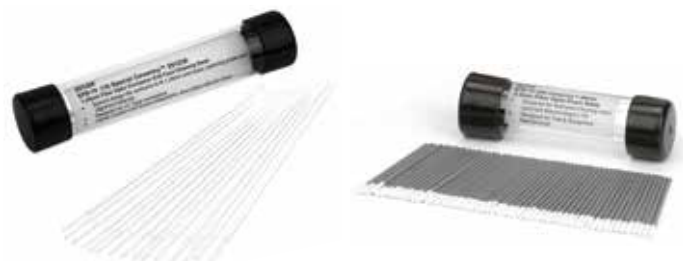
#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52066141	FSA Splice Wipes	75 IMPREGNATED, LINT FREE WIPES

Aqueous impregnated wipe eliminating the need for Isopropyl Alcohol (IPA). A useful tool in the preparation of fibre prior to splicing.



## Cleaning Swabs



### Cleaning Swabs

#### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52060964	48042F	2.5mm RETICULATED FOAM PRECISION SWAB (TUBE OF 50) 6.8cm in length
52060965	25125F	1.25mm SWABS (TUBE OF 15) 15cm in length
52066138	25183	2.5mm FIBRE OPTIC SWAB (100) 15cm in length
52066139	25123X	1.25mm FIBRE OPTIC SWAB (100) 15cm in length



## Connector Cleaning System (Dry Method)



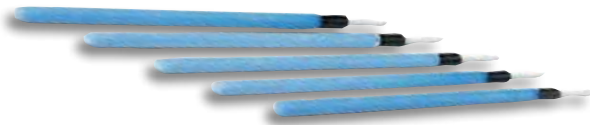
### FEATURES

- Special lint-free fabric-on-a-reel quickly cleans ferrule endfaces of dust, oil and other contaminants
- Cleaning system is completely self-contained
- Dry Cleaning Method
- A single cleaning reel can be used for over 400 ferrule cleanings
- ReelCleaner™ can be used on all connector types including MTP and MT-RJ

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50606925	60692	948 REELCLEANER CONNECTOR CLEANING SYSTEM
50107925	10792	948/2 REPLACEMENT REEL SET 2 PACK

## Adaptor Cleaning Wands



### FEATURES

- Specially-created, lint-free materials clean hard-to-reach fibre optic interfaces, bulkhead adaptors and ferrule alignment sleeves

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50605713	60571	946 FIBRE ADAPTOR CLEANING WANDS/PK 10
50606895	60689	946/K ADAPTOR CLEANING WANDS 200PC
50606901	60690	947 ADAPTOR CLEANING WANDS PACK OF 10PCS
50606918	60691	947/K WAND, CLEANING, 1.25MM, BOX/200

## Fibre Optic Scribe



### FEATURES

- Pen-type scribe with screw-in non-reversible carbide tip
- Wedge shaped tip
- Pocket-clip
- Stainless steel barrel

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52050965	PA1922-1	FIBRE OPTIC CARBIDE SCRIBE

### SPECIFICATIONS

Weight	2oz. (57g)
Length	5.25" (197mm)

## Fibre Optic Polishing Pucks



### FEATURES

- Manufactured from aluminum with tungsten coating
- Cleaner than conventional plastic pucks because less debris left behind
- Double the lifetime of conventional plastic pucks

### ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
52051275	PA1920-1	POLISHING PUCK FIBRE SC ST FC
52051276	PA1926-1	POLISHING PUCK FIBRE LC

### SPECIFICATIONS

Weight	2oz. (57g)
Length	7.75" (197mm)

## Fibre Optic Co-Polymer Polishing Puck



### FEATURES

- Used for standard ST, SC and FC connectors with 2.5mm ferrules

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50455982	45598	FIBRE OPTIC CO-POLYMER POLISHING PUCK

## Fibre Optic Stainless Steel Polishing Puck



### FEATURES

- Used for standard ST, SC and FC connectors with 2.5mm ferrules
- Made of stainless steel to last for years of termination
- Precision hole prevents even the slightest misalignment
- Grooves in the puck's surface eliminate "sticking" during wet polishes

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50455990	45599	FIBRE OPTIC STAINLESS STEEL POLISHING PUCK

## Fibre Optic Polishing Pad



### FEATURES

- Resilient pad is perfect for PC (physical contact) pre-radiused ferrules
- 3" x 8" (7.6 x 203.2mm)
- 70 durometer

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50456126	45612	FIBRE OPTIC POLISHING PAD

## Fibre Optic Inspection Microscope



### FEATURES

- High-powered microscope is used to check a connector's endface for excess epoxy, core or cladding chips or other irregularities that degrade optical performance of the connector
- Laser safety filter protects eyesight
- Rubber eyecup for comfortable use
- Rugged aluminum housing
- 200X magnification
- Universal adaptor works with ST, SC or FC connectors
- Includes padded nylon carrying case

### ORDERING INFORMATION

PART NO.	UPC NO.	DESCRIPTION
50456512	45651	MICROSCOPE (200X)





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