



525		LINK LOSS SUMMARY REPORT																																																																																																																																																																																																																																																																					
Job ID:	2014A1T19	Cable ID: 1010254																																																																																																																																																																																																																																																																					
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Cable Information Cable ID: 1010254 Manufacturer: Lumentum Connector Type: ST Length: 254 meters Definite:																																																																																																																																																																																																																																																																							
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Measurement Results <table border="1"> <thead> <tr> <th rowspan="2">Fiber ID</th> <th colspan="4">1310nm</th> <th colspan="4">1550nm</th> <th rowspan="2">PASS/FAIL</th> </tr> <tr> <th>Loss A-B (dB)</th> <th>Loss B-A (dB)</th> <th>Average (dB)</th> <th>ORL A-B (dB)</th> <th>Loss A-B (dB)</th> <th>Loss B-A (dB)</th> <th>Average (dB)</th> <th>ORL A-B (dB)</th> </tr> </thead> <tbody> <tr><td>1</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.24</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.56</td><td>PASS</td></tr> <tr><td>2</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.24</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.56</td><td>PASS</td></tr> <tr><td>3</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.24</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.56</td><td>PASS</td></tr> <tr><td>4</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.24</td><td>10.12</td><td>10.18</td><td>10.15</td><td>55.56</td><td>PASS</td></tr> 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Pass/Fail Thresholds Link Loss: Return Loss: 50 dB @ 1300nm: 15 dB @ 1500nm: 12 dB																																																																																																																																																																																																																																																																							
Equipment Information Serial Number of Tester @ Site A: Serial Number of Tester @ Site B: Firmware Version:																																																																																																																																																																																																																																																																							

APPLICATIONS:

The 525 family of products provides an accurate, fast and easy to use method to measure insertion and return loss on multi-mode and single-mode fiber optic cables. And, the one button AUTOTEST ensures the user is guided through the measurement to obtain dual wavelength (850/1300nm or 1310/1550nm) bi-directional insertion loss measurements. Plus, the 525 single-mode family of products has a return loss measurement mode.

With a rugged and conveniently sized design, the 525 may be used in the demanding and severe environment of the outside plant. The large backlit display and sealed membrane panel allows for use in the harshest of locations. The 525 can store up to 1500 measurement records to be downloaded to a database manager that can then organize and print certification reports.

Internal rechargeable batteries power the 525s. When fully charged, the 525 provides 8 hours of continuous operation.

The 525's advanced engineering has simplified the measurement process to 4 simple steps:

1. Set-up: Menus to select type of measurement, wavelength(s), locations, user names, and insertion loss and return loss PASS/FAIL thresholds.
2. Perform reference measurement between units (only required once).
3. Press AUTOTEST and the instrument automatically performs bi-directional measurements, informs the user of average loss, margin from threshold, and a PASS/FAIL indicator. The test result is automatically stored to internal memory.
4. Once back in the office the user can download the measurements from the 525 via the RS232 port to the Report Writer™. The user can review the test results and print custom fiber or complete cable verification reports.

PRODUCT FAMILY:

- **525-30-PCX**
850/1300nm Automated Insertion Loss - PC Connectors
- **525-60-PCX**
1310/1550nm Automated Insertion Loss - PC Connectors
- **525-60-APC**
1310/1550nm Automated Insertion Loss - APC Connectors
- **525-60RL-APC**
1310/1550nm Automated Insertion/Return Loss - APC Connectors

FEATURES:

- Automated bi-directional testing
- Optical return loss measurements
- Dual wavelength insertion loss measurements
- Multi-mode and Single-mode models feature user settable PASS/FAIL thresholds
- Communications between units via messaging
- Wide dynamic range optical power meter
- Test record storage and data management software
- Rugged outside plant instrument package
- Universal connector interface

525 | Smart Optical Loss Test Set

The 525 Report Writer™ generates professional reports detailing the tests performed on the 525 instrument. The 525 Report Writer™ generates cable reports detailing all fibers tested in that cable and fiber reports on a singular fiber. The report is split into four sections: Customer Information, Cable Information, Site Information and Measurement Results. The user can customize the report for their own company by placing a graphic in the upper right hand corner.

SPECIFICATIONS:

Instrument Type Interface Connector AUTOTEST measurements	525-30-PCX		525-60-PCX		525-60-APC		525-60RL-APC	
	Multimode Smart Loss Test Set		Singlemode Smart Loss Test Set		Singlemode Smart Loss Test Set		Singlemode Smart Loss Test Set	
	PC Connector Interface		PC Connector Interface		APC Connector Interface		APC Connector Interface	
	AUTOTEST performs Insertion Loss Test		AUTOTEST performs Insertion Loss Test and Manual Return Loss		AUTOTEST performs Insertion Loss Test and Manual Return Loss		AUTOTEST performs Insertion and Return Loss in one Test	
Power Meter Specifications								
Detector Type	InGaAs		InGaAs		InGaAs		InGaAs	
Display Range	+10dBm to 70dBm		+10dBm to 70dBm		+10dBm to 70dBm		+10dBm to 70dBm	
Calibrated Wavelengths	850, 980, 1300, 1310, 1550, 1480, 1625		850, 980, 1300, 1310, 1550, 1480, 1625		850, 980, 1300, 1310, 1550, 1480, 1625		850, 980, 1300, 1310, 1550, 1480, 1625	
Absolute Accuracy	±0.25dB		±0.25dB		±0.25dB		±0.25dB	
Resolution	0.01dB		0.01dB		0.01dB		0.01dB	
Measurement Units	dBm, dB, W		dBm, dB, W		dBm, dB, W		dBm, dB, W	
Connector Type	UCH-UPC flat polish adapter 62.5/125SM		UCH-UPC flat polish adapter 9/125SM		UCI-APC polish adapter 9/125 SM		UCI-APC polish adapter 9/125 SM	
Source Specifications								
Center Wavelength	850nm ±30nm	1300nm ±30nm	1310nm ±30nm	1550nm ±30nm	1310nm ±30nm	1550nm ±30nm	1310nm ±30nm	1550nm ±30nm
Spectral Width	<170	<170	<5	<5	<5	<5	<5	<5
Output Power	>-21 dBm	>-21 dBm	>-10 dBm	>-10 dBm	>-10 dBm	>-10 dBm	>-10 dBm	>-10 dBm
Output Stability	±0.10dB/ 8 hours	±0.10dB/ 8 hours	±0.15dB/ 8 hours	±0.15dB 8 hours	±0.15dB/ 8 hours	±0.15dB 8 hours	±0.15dB/ 8 hours	±0.15dB 8 hours
Coupled Power Ratio (CPR)	25dB to 29dB ±1dB	21dB to 22dB ±1dB						
HOMP	0.30dB to 0.80dB							
Autotest Insertion Loss Specifications								
Test Port Measurement Range	25dB		40dB		40dB		40dB	
Calibrated Wavelengths	850, 1300nm		1310, 1550nm		1310, 1550nm		1310, 1550nm	
Return Loss Specifications								
Measurement Range	n/a		10 to 45dB		10 to 65dB		10 to 65dB	
Accuracy	n/a		.5dB		.5dB		.5dB	
General Descriptions								
Display Type	Graphics Liquid Crystal with Backlight		Graphics Liquid Crystal with Backlight		Graphics Liquid Crystal with Backlight		Graphics Liquid Crystal with Backlight	
Fiber Type	Multimode 62.5/125 um		Singlemode 9/125 um		Singlemode 9/125 um		Singlemode 9/125 um	
Standard Connector Type	FC, SC, ST other connector options available		FC, SC, ST other connector options available		FC, SC, ST other connector options available		FC, SC, ST other connector options available	
Laser Classification	Class 1 CFR 1040		Class 1 CFR 1040		Class 1 CFR 1040		Class 1 CFR 1040	
Operating Temperature	0°C to +50°C		0°C to +50°C		0°C to +50°C		0°C to +50°C	
Storage Temperature	-20°C to +60°C		-20°C to +60°C		-20°C to +60°C		-20°C to +60°C	
Relative Humidity	0 to 95% RH non-condensing		0 to 95% RH non-condensing		0 to 95% RH non-condensing		0 to 95% RH non-condensing	
Size	19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)		19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)		19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)		19.3 x 10.9 x 5.8 cm (7.6 x 4.3 x 2.3 in)	
Weight	1.0kg (2.2 lbs)		1.0kg (2.2 lbs)		1.0kg (2.2 lbs)		1.0kg (2.2 lbs)	
Power	Internal rechargeable NiMH		Internal rechargeable NiMH		Internal rechargeable NiMH		Internal rechargeable NiMH	
Battery Life	>8 hours		>8 hours		>8 hours		>8 hours	

ORDERING INFORMATION

Model	Description	Accessories	
525-30-PCX	850/1300nm Smart Optical Loss Test Set - PC Connectors	1020 NTT/FC-PC Snap-On Connector Adapter 1030 AT&T/ST-PC Snap-On Connector Adapter	2K2K-106-01 FC/PC to FC/PC Multi-mode (62.5/125) patch cord
525-60-PCX	1310/1550nm Smart Optical Loss Test Set - PC Connectors	1062 NTT/SC-PC Snap-On Connector Adapter AD-108 Universal Connector Adapter, DIN 47256 (LSA)	2K3K-101-01 FC/PC to FC/PC Single mode (9/125) patch cord
525-60-APC	1310/1550nm Smart Optical Loss Test Set - APC Connectors	AE2-10 Universal Connector Adapter, E2000 (LSH) APC-108 NTT/FC-PC Universal Connector Adapter	3K3K-106-01 ST/PC to ST/PC Multi-mode (62.5/125) patch cord 6K6K-101-01 SC/PC to SC/PC Single mode (9/125) patch cord
525-60RL-APC	1310/1550nm Smart Optical Loss Test Set - APC Connectors	ASC-108 NTT/SC-PC Universal Connector Adapter ATS-108 AT&T/ST-PC Universal Connector Adapter 1089 Snap-On Connector Adapter, D4 1010 Snap-On Connector Adapter, DIN 47256 10E2 Snap-On Connector Adapter, E2000 10EO Snap-On Connector Adapter, EC 2K2K-101-01 ST/PC to ST/PC Single mode (9/125) patch cord	6K6K-106-01 SC/PC to SC/PC Multi-mode (62.5/125) patch cord 945 All in One Cleaning Tool

The 525 comes with hard carrying case, RS-232 data transfer cable, Report Writer™ software, Adapter/charger, and All-In-One connector cleaner.



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