OTS-300 Express Series
Power Meters/Sources and Testers

A LANscape® Solutions Product

Description

Corning Cable Systems' OTS-300 Express Series includes intelligent, versatile optical meters, sources and testers that simultaneously test and store dual-wavelength attenuation measurements. At the press of a button, dual-wavelength results are stored and the next fiber measured. These test sets are used during installation, system qualification and maintenance. The combination of practical features, simple operation, field performance and rugged design makes them perfect for virtually all fiber optic testing environments from multimode access networks and data centers to single-mode telephony and CATV.

Features / Benefits

- Auto testing provides dual-wavelength display and storage that cuts testing time in half

- Eliminates field paperwork; stores up to 900 dual-wavelength measurements and 50 jobs

- LinkLoss™ Windows-based PC Software provides storage, printing, viewing, bidirectional charts and export

- Four-wavelength source: 850/1300 nm LED and 1310/1550 nm laser

- Dual-wavelength 850/1300 nm and 1310/1550 nm sources and testers; 1625 nm sources and testers also available

- Emits and detects 2 kHz tone for detection, continuity and tracing

- Selectable 0.1/0.01 dB resolution

- Reliable InGaAs performance for +3 to -70 dBm (standard range) and +20 to -60 dBm (CATV range)

- Flexible three-way power: AC, internal rechargeable battery, replaceable alkaline batteries

OTS-300 Series Optical Tester | Photo TEQ-07

- Backlit, easy-to-read display

- Rugged ABS housing

- Wide operating temperature range of -18° to +50°C

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Meter Technical Data

	OTS-310 Meter / OTS-311D and OTS-312XD Testers
Fiber Type	Multimode and single-mode: 100/140 µm to 9/125 µm
Wavelength Range	800 to 1600 nm
Detector Type	InGaAs
Calibrated Wavelengths	850, 1300, 1310, 1550, 1625 nm
Measurement Range	+3 to -70 dBm (standard) / +20 to -60 dBm (CATV) Auto mode: +3 to -55 dBm (multimode) / +3 to -60 dBm (single-mode) / +3 to -45 dBm (CATV)
Accuracy	OTS-310: ±0.1 dB @ 0 to -60 dBm (1300-1625 nm) ±0.2 dB @ 0 to -50 dBm (850 nm) OTS-320: ±0.1 dB @ +20 to -50 dBm (1300-1625 nm) ±0.2 dB @ +20 to -40 dBm (850 nm)
Linearity	OTS-310: ±0.1 dB @ 0 to -60 dBm (1300-1625 nm) ±0.1 dB @ 0 to -50 dBm (850 nm) OTS-320: ±0.1 dB @ +20 to -50 dBm (1300-1625 nm) ±0.1 dB @ +20 to -40 dBm (850 nm)
Resolution	0.01 dB / 0.1 dB (selectable)
Connector Adapters (interchangeable)	ST® compatible, FC, SC, DIN

Specifications

Optical

	LEDs OTS-311D Tester / OTS-303D, OTS-3MDSD LED Sources	Lasers OTS-312XD Tester / OTS-304XD, OTS-3MDSD Laser Sources	Lasers OTS-316XD Tester / OTS 304 XD Laser Sources
Central Wavelength	850/1300 nm ± 20 nm	1310/1550 nm ± 20 nm	1550/1625 nm ± 20 nm
Output Power	• ≥ -18 dBm coupled into 62.5/125 µm fiber	• -8 dBm coupled into 9/125 µm fiber • CW or 2 kHz modes, switchable	• -8 dBm (1550 nm) / -5 dBm (1625 nm) coupled into 9/125 µm fiber • CW or 2 kHz modes, switchable
Spectral Width	≤ 50 nm at 850 nm ≤ 125 nm at 1300 nm (FWHM typical)	≤ 5 nm (RMS)	≤ 5 nm (RMS)
Output Stability	± 0.1 dB at 23°C for 8 hours / (±0.05 dB OTS-311D only)		
Connector Type (Dedicated) Single Output	ST compatible, FC, SC, DIN	ST compatible, FC, SC, DIN	ST compatible, FC, SC, DIN

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Specifications *(continued)*

General

Operating Temperature	0° to +50°C (32° to +122°F)
Storage Temperature	-40° to +60°C (-40° to +140°F)
Display	• dBm/dB with reference value • Active wavelength • Self-test with error messages • Transmitter on (TX) • Watts • 2 kHz pulsing on testers and sources • Low battery (last available battery) • Selectable automatic shut-off (30 minutes) • Out-of-range (positive or negative)
Data Storage Capacity	900 fibers at both wavelengths / 50 files
Power Supply	Three-way: Internal rechargeable Ni-Cd, replaceable batteries (AA / LR6, 1.5 V), AC adapter (6 V / 300 mA)
Battery Life	Meter: 34 hours typical (15 Ni-Cd and 19 lithium) Source: 26 hours typical (11 Ni-Cd and 15 lithium)
Dimensions	5.9 x 3.4 x 1.6 in (150 x 85 x 40 mm)
Weight	1 lb (≤ 0.5 kg)

Ordering Information

Select the kit that best suits your application. Kits include everything needed for testing.

Test Kits

Part Number	Description
OTS-300MD-KIT-XX	Multimode Intelligent Test Kit includes the OTS-303D, 850/1300 nm LED source and OTS-310 power meter, accessories and cleaning supplies packaged in a 3HH transit case
OTS-300SD-KIT-XX	Single-mode Intelligent Test Kit includes the OTS-304XD, 1310/1550 nm laser source and OTS-310 power meter, accessories and cleaning supplies packaged in a 3HH transit case
OTS-300LD-KIT-XX	Single-mode Intelligent Test Kit includes the OTS-306XD, 1310/1550 nm laser source and OTS-310 power meter, accessories and cleaning supplies packaged in a 3HH transit case
OTS-3CATV-KIT-XX	CATV Single-mode Intelligent Test Kit includes the OTS-304XD, 1310/1550 nm laser source and OTS-320 CATV power meter, accessories and cleaning supplies packaged in a 3HH transit case
OTS-3MDSD-KIT-XX	Single-mode and Multimode Intelligent Test Kit includes the OTS-3MDSD, 850/1300 nm LED / 1310/1550 nm laser source and OTS-310 power meter, accessories and cleaning supplies packaged in a 3HH transit case
OTS-311D-KIT-XX	Multimode, Bidirectional, Intelligent Test Kit includes two OTS-311D, 850/1300 nm LED testers, accessories and cleaning supplies packaged in a 3HH transit case
OTS-312XD-KIT-XX	Single-mode, Bidirectional, Intelligent Test Kit includes two OTS-312XD, 1310/1550 nm laser testers, accessories and cleaning supplies packaged in a 3HH transit case
OTS-316XD-KIT-XX	Single-mode, Bidirectional, Intelligent Test Kit includes two OTS-316XD 1150/1625 nm laser testers, accessories and cleaning supplies packaged in a 3HH transit case
Connector Code (XX)	*SC = 52, FC = 54, ST® compatible = 55, DIN = 57*

Ordering Information *(continued)*

Meters, Testers and Sources

Part Number	Description	Connector Types	Code (XX)
OTS Optical Meters *(Order with OTS-300 Series Source)*			
OTS-310-XX	OTS-310 Optical Meter (meter only) includes LinkLoss™ Software, RS232 cable, one connector adapter, holster, AC adapter and operating manual	SC FC ST® compatible DIN	52 54 55 57
OTS-320-XX	CATV Version of OTS-310 above		
OTS-311D Optical Testers (LEDs) *(Order two for bidirectional testing)*			
OTS-311D-XX	Multimode OTS-311D Optical Tester 850/1300 nm, single dedicated output; includes LinkLoss Software, RS232 cable, connector adapter for meter port, holster, AC adapter and operating manual	SC ST compatible	52 55
OTS-312XD Optical Testers (Lasers) *(Order two for bidirectional testing)*			
OTS-312XD-XX	Single-mode OTS-312XD Optical Tester 1310/1550 nm, single dedicated output; includes LinkLoss Software, RS232 cable, one connector adapter for meter port, holster, AC adapter and operating manual	SC FC ST compatible DIN	52 54 55 57
OTS-322XD-XX	CATV Version of OTS-312XD above		
OTS-316XD-XX	Single-mode OTS-316XD Optical Tester 1550/1625 nm, single dedicated output: includes LinkLoss Software, RS232 cable, one connector adapter for meter port, holster, AC adapter and operating manual	SC FC ST compatible DIN	52 54 55 57
OTS-303D, OTS-304XD and OTS-3MDS Sources *(order with OTS-300 Meter)*			
OTS-303D-XX	Dual-Wavelength LED 850/1300 nm Source, single dedicated output; includes holster, AC adapter and operating manual	SC ST compatible	52 55
OTS-304XD-XX	Dual-Wavelength Laser 1310/1550 nm Source, single dedicated output; includes holster, AC adapter and operating manual	SC FC ST compatible DIN	52 54 55 57
OTS-306XD-XX	Dual-Wavelength Laser 1550/1625 nm Source, single dedicated output; includes holster, AC adapter and operating manual	SC FC ST compatible DIN	52 54 55 57
OTS-3MDSD-XX	Combination Dual LED Multimode (850/1300 nm) and Dual Laser Single-mode (1310/1550 nm) Source, single dedicated output; includes holster, AC adapter and operating manual	SC FC ST compatible DIN	52 54 55 57

Ordering Information *(continued)*

Extra Connctor Adapters

Part Number	Description	Connector Types	Code (XX)
OT-1AXX	Extra Connector Adapters for power meter port	FC ST® compatible DIN	54 55 57
OT-SC	Extra SC Connector Adapter	SC	---

Accessories

Part Number	Description
BFA-ST	ST Compatible Bare Fiber Adapter
BFA-FC	FC Bare Fiber Adapter
BFA-SC	SC Bare Fiber Adapter
BFA-DIN	DIN Bare Fiber Adapter
2HH-TCASE	Transit Case for two handheld units
3HH-TCASE	Transit Case for three handheld units
On Request	Test Jumpers (call for specific configuration)

Note: Simultaneous dual-wavelength measurement and storage is exclusive to the OTS-300 Series of products. Any Corning Cable Systems meter, source and tester may be used with the OTS-300 products for basic power and attenuation testing; however, the prime benefit, synchronized testing, can only be achieved by using the OTS-300 Series of power meters, sources and testers.

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