OS-400 Series Optical Light Source

A LANscape[®] Solutions Product

Corning
Cable Systems

Applications

 Installation, testing and troubleshooting of LAN, telco, CATV and FTTx networks

Description

The Corning Cable Systems OS-400 Series Optical Light Source provides accurate, user-friendly, and economical fiber testing capabilities for incoming inspections, maintenance, troubleshooting, and system verification. The OS-400 features an ergonomic design that is rugged enough to withstand the harshest testing environments. This source can be coupled with a Corning Cable Systems power meter to create an attenuation test set.

The OS-400 Series Optical Light Source is a multifunctional optical light source with up to three single-mode wavelengths on one port or four wavelengths (two single-mode and two multi-mode) on two ports. A variety of wavelength configurations is available including 850 nm, 1300 nm, 1310 nm, 1490 nm and 1550 nm. The OS-400 sources have the highest output power in the industry.

The OS-400 offers source signal modulation frequencies of 270 Hz, 1 kHz, 2 kHz, CW (unmodulated) and Auto. A source modulation setting of Auto allows compatible Corning Cable Systems power meters to automatically detect the wavelength being transmitted by the source. Additionally, the OS-400 can be used to transmit a reference power level to a compatible power meter over a long distance, allowing a remote reference to be set without the source and meter being at the same location.

The OS-400 Series Light Source includes the unique Universal Interface which allows the user to change the source connector adapters in the field with no tools. A wide variety of industry-standard adapters is available.



OS-400 Series Optical Light Source | LAN630

Features / Benefits

- Rugged and compact handheld source
- Wide variety of source wavelength configurations
- FTTx ready 1310 nm/1490 nm/1550 nm tri-wavelength model available
- Universal interface with field-interchangeable connector adapters
- Remote power level referencing with compatible power meters
- Source frequency modulation and automatic wavelength detection modes
- AC and battery operation with battery life up to 120 hours





Specifications¹

Specifications	OS-404XD/OS-405T/OS-4MDSD	OS-407T	OS-403D/OS-405T/OS-4MDSD	
Central Wavelength (nm)	1310 ± 20 1550 ± 20 1550 ± 20	1310 ± 20 1490 ± 20	850 ± 25 1300 + 50/-10	
Spectral Width ² (nm)	≤ 5	≤ 5	50/135	
Output Power (dBm)	≥ 1 / ≥1	$\geq 1 / \geq -4.5 / \geq -3$	≥ -18 / ≥ -18 (62.5µm)	
Power Stability 3 (dB) 8 hours	±0.10	±0.10	±0.10	
Battery Life ⁴ (hours)	120	120	120	
Enables Automatic Wavelength Recognition	Yes	Yes	Yes	
Tone Generation (Hz)	270, 1 k, 2 k	270, 1 k, 2 k	270, 1 k, 2 k	
Warranty (years)	1	1	1	
Recommended Calibration Interval (years)	3	3	3	
Size	18.5 x 10.0 x 5.5 cm (7.25 x 4 x 2.125 in)			
Weight	0.4 kg (0.9 lb)			
Operating Temperature	-10° to 50° C (14° to 122° F)			
Storage Temperature	-40° to 70° C (-40° to 158° F)			
Relative Humidity	0% to 95% non-condensing			
Safety	21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001 Class 1M Laser Product			







Guaranteed unless otherwise specified. All specifications valid at $23^{\circ} \pm 1^{\circ}C$, with an FC connector. 2 rms for lasers and $^{-3}$ dB width for LEDs; typical values for LEDs.

³ After 15 minutes warmup; expressed as \pm half the difference between the maximum and minimum values during the period, with an APC connector on the power meter.

Typical autonomy in auto mode.

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Ordering Information

Part Number	Description
OS-403D-XX	Optical Source with 850 nm/1300 nm LED; one connector adapter of choice, AC adapter, wrist strap and alkaline batteries included
OS-404XD-YY	Optical Source with 1310 nm/1550 nm laser; one connector adapter of choice, AC adapter, wrist strap and alkaline batteries included
OS-405T-XX-YY	Optical Source with 850 nm/1300 nm LED and 1550 nm laser; two connector adapters of choice, AC adapter, wrist strap,and alkaline batteries included
OS-407T-YY	Optical Source with 1310 nm/1490 nm/1550 nm laser; one connector adapter of choice, AC adapter, wrist strap and alkaline batteries included
OS-4MDSD-XX-YY	Optical Source with 850 nm/1300 nm LED and 1310 nm/1550 nm laser; two connector adapters of choice, AC adapter, wrist strap and alkaline batteries included
Connector Code (XX)	$SC = SC$, $ST = ST^{\otimes}$ compatible, $FC = FC$
Connector Code (YY)	SC = SC, $ST = ST$ compatible, $FC = FC$

Accessories

Description Universal Interface Source Connector Adapter, SC	
Universal Interface Source Connector Adapter, FC	
Optical Power Meter with 10 to -60 dBm range	
Optical Power Meter with 26 to -50 dBm range	
850 nm VCSEL Source with fixed SC connector port	
Hard-Shell Transit Case for two 400 series instruments	
AC Power Adapter for 120 VAC	
Test Jumper Kits available in a variety of configurations – Contact Customer Service for available options	
	Universal Interface Source Connector Adapter, SC Universal Interface Source Connector Adapter, ST compatible Universal Interface Source Connector Adapter, FC Optical Power Meter with 10 to -60 dBm range Optical Power Meter with 26 to -50 dBm range 850 nm VCSEL Source with fixed SC connector port Hard-Shell Transit Case for two 400 series instruments AC Power Adapter for 120 VAC Test Jumper Kits available in a variety of configurations –







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Corning Cable Systems LLC • PO Box 489 • Hickory, NC 28603-0489 USA

1-800-743-2675 • FAX: +1-828-901-5973 • International: +1-828-901-5000 • http://www.corning.com/cablesystems

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