OS-400 Series Optical Light Source

Corning Cable Systems

A LANscape[®] Solutions Product

Corning OS-400 Specs

Provided by www.AAATesters.com

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 industrystandard 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

CORNING Discovering Beyond Imaginat

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Specifications¹

1550 \pm 20 1550 \pm 201490 \pm 201300 \pm 50/-10Spectral Width*(nm) \leq 5 \leq 550/135Output Power (dBm) \geq 1 / \geq 1 \geq 1 / \geq -4.5 / \geq -3 \geq -18 / \geq -18 (62.5µm)Power Stability 3 (dB) 8 hours \pm 0.10 \pm 0.10 \pm 0.10 \pm 0.10Battery Life*(hours)120120120120Enables Automatic Wavelength RecognitionYesYesYesYesTone Generation (Hz)270, 1 k, 2 k270, 1 k, 2 k270, 1 k, 2 k270, 1 k, 2 kWarranty (years)1111Recommended Calibration Interval (years)3333Size18.5 x 10.0 x 5.5 cm (7.25 x 4 x 2.125 in) \vee \vee Weight0.4 kg (0.9 lb) \vee \vee \vee \vee Operating Temperature-10° to 50° C (14° to 122° F) \vee \vee \vee Relative Humidity0% to 95% non-condensing \vee \vee \vee \vee	•	OS-404XD/OS-405T/OS-4MDSD	OS-407T	OS-403D/OS-405T/OS-4MDSD
Output Power (dBm) $\geq 1 / \geq 1$ $\geq 1 / \geq -4.5 / \geq -3$ $\geq -18 / \geq -18 (62.5 \mu m)$ Power Stability ³ (dB) ± 0.10 ± 0.10 ± 0.10 ± 0.10 B hours 120 120 120 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) Ves Ves Weight 0.4 kg (0.9 lb) 0 10° to 50° C (14° to 122° F) Ves Storage Temperature -40° to 70° C (-40° to 158° F) Ves Ves Relative Humidity 0% to 95% non-condensing Ves Ves Ves Safety 21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001 Ves Ves	Central Wavelength (nm)	1550 ± 20		
Power Stability ³ (dB) ±0.10 ±0.10 ±0.10 8 hours ±0.10 ±0.10 ±0.10 Battery Life* (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) Veight 0.4 kg (0.9 lb) Operating Temperature -10° to 50° C (14° to 122° F) 5 5 Storage Temperature -40° to 70° C (-40° to 158° F) 8 8 Relative Humidity 0% to 95% non-condensing 5 5 Safety 21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001 5	Spectral Width ² (nm)	≤ 5	≤ 5	50/135
8 hours 120 120 120 Battery Life*(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) Ves Weight 0.4 kg (0.9 lb) Ves Ves Operating Temperature -10° to 50° C (14° to 122° F) Ves Ves Storage Temperature -40° to 70° C (-40° to 158° F) Ves Ves Relative Humidity 0% to 95% non-condensing Ves Ves Safety 21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001 Ves	Output Power (dBm)	≥ 1 / ≥1	$\ge 1 / \ge -4.5 / \ge -3$	≥ -18 / ≥ -18 (62.5µm)
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	Power Stability ³ (dB) 8 hours	±0.10	±0.10	±0.10
Recognition 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) Image: Comparison of the state of the s	Battery Life⁴(hours)	120	120	120
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) 3 Weight 0.4 kg (0.9 lb) 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	Enables Automatic Wavelength Recognition	Yes	Yes	Yes
Recommended Calibration Interval (years) 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	Tone Generation (Hz)	270, 1 k, 2 k	270, 1 k, 2 k	270, 1 k, 2 k
(years) 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	Warranty (years)	1	1	1
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	Recommended Calibration Interval (years)	3	3	3
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	Size	18.5 x 10.0 x 5.5 cm (7.25 x 4 x 2.125 in)		
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	Weight	0.4 kg (0.9 lb)		
Relative Humidity 0% to 95% non-condensing Safety 21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001	Operating Temperature	-10° to 50° C (14° to 122° F)		
Safety 21 CFR 1040.10 and IEC 60825-1:1993+A1:1997+A2:2001	Storage Temperature	-40° to 70° C (-40° to 158° F)		
	Relative Humidity	0% to 95% non-condensing		
	Safety			

Notes:

¹ Guaranteed unless otherwise specified. All specifications valid at 23° ±1°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 ± half the difference between the maximum and minimum values during the period, with an APC connector on the power meter.
 ⁴ Typical autonomy in auto mode.



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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

Part Number	Description	
UI-SC	Universal Interface Source Connector Adapter, SC	
UI-ST	Universal Interface Source Connector Adapter, ST compatible	
UI-FC	Universal Interface Source Connector Adapter, FC	
OM-410-XX	Optical Power Meter with 10 to -60 dBm range	
OM-420-XX	Optical Power Meter with 26 to -50 dBm range	
OS-850V-52	850 nm VCSEL Source with fixed SC connector port	
CASE-HH-400	Hard-Shell Transit Case for two 400 series instruments	
PS-9-1	AC Power Adapter for 120 VAC	
TJK-XXXX-XX-STD	Test Jumper Kits available in a variety of configurations – Contact Customer Service for available options	



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