





# Optical Light Source Comparisons

Revision 3 (7/08/2015)

Specification	Meaning	KI 2824	VIAVI (JDSU) OLS-85 2313/05	EXFO FLS-300-12D -23BL	Noyes OLS 4
Model pictures (not to scale)					
<b>Automatic test</b>					
Trade name		'Autotest'	'Auto-λ / Multi-λ'	'Auto-λ recognition'	'Wave ID'
Autotest compatibility with other products	More is better	All KI2000, KI3000, KI7000 series Meters, Loss Test Set & Two Way Testers	OLP-3x, OLP-55, OLP-85	Only FPM-300 Meter & FOT-300 Loss Test Set	Only OPM 4 & 5
Auto wavelength recognition	Yes is better	Yes	Yes	Yes	Yes
Source s/n identification	Yes is better	Yes	No	No	No
<b>Source</b>					
Wavelengths		LED: 850/1300 nm, Laser: 1310/1550 ± 20 nm	MM: 850/1300 ±20 nm, SM: 1310/1550 ±20 nm	LED: 850 ± 25 nm LED: 1300 +50/-20 nm Laser: 1310/1550 ± 20 nm	LED: 850 ± 30 nm LED: 1300 +30/-20nm Laser: 1310/1550 ± 20 nm
Spectral width	Smaller is better	Laser: 3 nm(typ)	MM: 50 for 850nm, 170 for 1300nm SM: 5 nm	Laser: ≤ 5 nm	Laser: 5 nm max LED: 40(typ) for 850nm, 120nm (typ) for 1300nm
Warm-up period	Smaller is better	15 min	Not specified but implied, 20 min	15 min	Laser: 15 min, LED: 5 min
Option for zero warm-up light source		Yes	No	No	No
Stability	Standard light source	LED: 0.01 dB (typ) Laser: 0.04 dB (typ) (for 15 min after warm up; ±2°C)	Short term: ±0.02 dB, within 15 min Long term: ±0.2 dB, within 8 hours, ±0.3°C, after warm-up	0.1 dB, 8 hr @ 23°C ±1°C, after warm up	0.1 dB over 8 hr after warm-up
	Zero warm-up light source	Laser:0.03 dB (typ) (no warm-up for 15 min; ±Δ3°C)	NA	NA	NA
Stability over temperature	Standard light source	LED: 0.35dB (typ) over -15 to 55°C Laser: 0.6dB (typ) over -15 to 55°C	Not specified	Not specified	Not specified
	Zero warm-up light source	Laser: ≤0.2dB over -15 to 55°C	NA	NA	NA

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Output power		Laser: 0 dBm (adjustable over 7 dB in 0.01 step) LED: -20 dBm	SM: 0 to -3 dBm MM: -20 dBm	Laser: 1 dBm LED: -20 dBm	Laser: 0 dBm LED: -20 dBm
Output power accuracy	Smaller is better	± 1 dB (over operation temperature)	Not specified	Not specified	Not specified
Encircled Flux compliant	Yes is better	850 & 1300 nm	850nm	No	No
Reconnection repeatability	Smaller is better	0.1 dB (95% confidence)	Not specified	Not specified	Not specified
<b>Other unique features</b>					
Dust Cap with tiltail function		Yes	No	No	No
VisiTester option	VisiTester mixes a laser VFL with Autotest, so at the power meter end, the active test fiber winks, making it obvious to the user	Yes	No	No	No
VFL (Visual Fault Locator)		Yes	Yes	No	No
<b>General</b>					
Backlit LCD display	Yes is better	Yes	Adjustable brightness	No	No
Sunlight readability		Good	Not specified	Good	Good
Tilt Bail	Yes is better	Yes	No	No	No
Lanyard mount	Yes is better	Yes	No	Yes	Yes
Easy grip, all adult hands	Yes is better	Yes	No (much too thick)	No (much too thick)	Yes
Standard connector	Interchangeable is better	SC interchangeable	SC & FC interchangeable	1 from the available 12	1 from the available 4
Connector option		13	3	12	4
Metal free connector <sup>1</sup>	Yes is better	Yes	No	No	No

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Modulation	More is better	270, 1k, 2k Hz	270, 1k, 2k Hz	270, 1k, 2k Hz	270, 330, 1k, 2k Hz
Internal power supply		2x Alkaline AA Or 2x NiMH AA cells	8x AA Dry Battery Or LiON battery pack	3x AA Batteries	2x AA Battery
Battery life	Longer is better	80~90 hours	>10 h (lithium-ion, LiON) / >8 h (alkaline AA cells)	120 hours	30~72 hours
External power/charging		Via micro USB	Via AC Adapter	Via AC Adapter	Via optional AC Adapter
Operation/storage temperatures	Bigger is better	-15 to 55 °C / -25 to 70 °C	-10 to 55 °C / -20 to 70 °C	-10 to 50 °C / -40 to 70 °C	-10 to 50 °C / -30 to 60 °C
Weight / Volume	Smaller is better	420 gm / 698 cc	750 gm / 1491 cc	400 gm / 1018 cc	290 gm / 431 cc
Standard accessories		SC optical adapter, Operations manual, Calibration certificates, Carry pouch, Carry strap, Mandrel wraps (for MM sources), USB cable	SC2 soft shoulder case, Reporting software on USB stick, Optical adapters: SC-type and FC-type (interchangeable), User manual, 8x alkaline batteries	User guide, Certificate of Calibration, instrument stickers in six languages, AC adapter, three AA batteries, wrist strap	Protective rubber boot, 2x AA batteries, mandrels, carry case.
Calibration cycle	Longer is better	3 years	3 years	3 years	Not specified
Warranty	Longer is better	3 ~ 7 years	1 year	3 years	5 years

**Note 1:** Kingfisher instrument is supplied with metal-free optical interchangeable connector adaptors, which avoid critical contamination of connectors used in high power applications.

Disclaimer: This comparison is based on our interpretation of published specifications. No liability is accepted for any inaccuracy. We would be pleased to amend anything found to be inaccurate.