

## Pocket Size Optical Power Meter Comparison

Specification	Meaning	KI9600-InGaAs	JDSU OLP-6	EXFO EPM-102	Noyes CSM1-3
<b>Meter</b>		<b>Pocket size</b>	<b>Pocket size</b>	Handheld	<b>Pocket size</b>
Detector type	InGaAs is better for longer $\lambda$	<b>Extended wavelength InGaAs</b>	Ge	Ge	<b>InGaAs</b>
Power range		+5 to <b>-70 dBm</b>	+5 to -50 dBm	<b>+10</b> to -60 dBm	+6 to <b>-70 dBm</b>
Display Range		+5 to <b>-70 dBm</b>	<b>+10</b> to -65 dBm	<b>+10</b> to -65 dBm	+6 to <b>-70 dBm</b>
Damage level	More is better	<b>+10 dBm</b>	+10 dBm Warning: detector could be damaged at max display level	Not specified	Not specified
Uncertainty over power and temperature range (calculated)	Temp and time are important	<b>0.3 dB</b> <b>(+5 to -70 dBm, -15 to 55 °C)</b>	Not specified	Not specified	Not specified
Resolution	Smaller is better	<b>0.01</b>	<b>0.01</b>	0.01 from +10 to -50 dBm	<b>0.01</b>
Warm-up	Yes is bad	No warm up	No warm up	No warm up	No warm up
User Zeroing required	Yes is bad	No	No	No	No
Wavelength Sensitivity 30nm	Smaller is better	<b>0.03 dB</b>	Not specified	Not specified	Not specified
Polarisation sensitivity	Smaller is better	<b>&lt; 0.005 dB</b>	Not specified	Not specified	Not specified
Calibration $\lambda$ (nm)	More is better	<b>660, 850, 1300, 1310, 1390, 1490, 1550, 1610, 1625</b>	850, 1300, 1310, 1490, 1550	850, 1300, 1310, 1490, 1550, 1625	850, 1300, 1310, 1490, 1550, 1625
Accuracy at cal condition	Smaller is better	<b>0.09 dB (2%)</b>	0.20 dB (5%)	0.20 dB (5%)	0.3 dB (7%)
Externally Audited Calibration Laboratory	Yes is better	<b>Yes</b>	No	No	No
Re-calibration cycle	More is better	<b>3 year</b>	<b>3 year</b>	1 year	1 year
<b>General</b>					
Auto $\lambda$ sensing	Yes is better	No	<b>Yes</b>	No	<b>Yes</b>
Tone detection Hz for Fiber Identification	More is better	<b>200 - 2500 Hz</b>	270, 330, 1k, 2k Hz	No	270, 330, 1k, 2k Hz
Multi-fiber ID detection	Yes is better	<b>Yes</b>	No	No	No
Standard connector	More is better	<b>SC, FC, ST interchangeable adaptors</b>	Optional interchangeable adaptor	One interchangeable adaptor	One interchangeable connector adaptor
Metal free connector(1)	Yes is better	<b>Yes</b>	No	No	No
Max / Min recording	Yes is better	<b>Yes</b>	No	No	No
Display mode		<b>dBm, dB, W</b>	dBm, dB	<b>dBm, dB, W</b>	<b>dBm, dB, <math>\mu</math>W</b>

Display hold	Yes is better	<b>Yes</b>	No	No	No
Store reference for each wavelength	Yes is better	Yes	Yes	Yes	Yes
Save test result	Yes is better	No	No	No	No
Weight / Volume	Smaller is better	<b>130 gm / 145 cc</b>	180 gm / 286 cc	400 gm / 1017.5 cc	180 gm / 233.5 cc
Batteries		2x AAA alkaline or re-chargeable	2x AA mignon or re-chargeable	3x AA batteries	2x AA batteries
Battery life hours	More is better	<b>300 hrs</b>	130 hrs	<b>300 hrs</b>	<b>300 hrs</b>
Automatic power down		Yes, 10 min after last key push	Yes	Not specified	Yes
Operating temperature	Bigger is better	<b>-15 to 55 °C</b>	-10 to 50 °C	-10 to 50 °C	-10 to 50 °C
Storage temperature	Bigger is better	-25 to 70 °C	<b>-40 to 70 °C</b>	<b>-40 to 70 °C</b>	-30 to 60 °C
Warranty year	Longer is better	<b>3-7</b>	2	1	1
Environmental / ruggedness Standards conformation	Yes is better	<b>MIL-PRF-28800F &amp; IEC 60529: 2001/ EN 60529:1993+A1:2003</b>	No	No	No
PC interface	Yes is better	No	No	No	No
LCD with backlight	Yes is better	No	No	No	<b>Yes</b>
Standard accessories		SC,FC,ST optical connectors, traceable calibration certificate, soft carry pouch, Free Record keeping software, Multi-language Quick Reference Guide	2 dry batteries Mignon AA 1.5 V, operating manual, belt bag	User guide, Certificate of Calibration, instrument stickers in four languages, AC adapter, EUI-XX (ELS), connector adapter (FOA-XX) (EPM), three AA batteries, wrist strap, alcohol cleaning pads.	2 x AA batteries, protective rubber boot, user's guide, carry case

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