

**Pocket Size Optical Power Meter Comparison** revision 4 (17Feb2022)

Specification	Meaning	KI9600-InGaAs	JDSU OLP-35	EXFO FPM-302	Noyes CSM1-3
<b>Meter</b>		<b>Pocket size</b>	Pocket size	Handheld	Palm-sized
Detector type	InGaAs is batter for longer $\lambda$	InGaAs	InGaAs	Ge	InGaAs
Power range with specifications		<b>+5 to -60 dBm</b>	+5 to -50 dBm	Not specified & requires zero offset below -40 dBm	No specification
Display Range		<b>+5 to -60 dBm</b>	+13 to -65 dBm	+10 to -65 dBm	+6 to -70 dBm
Damage level (dBm)	More is better	<b>+15</b>	+16	No specification	No specification
Uncertainty over power & temp range	Temp important!	<b>0.3 dB (+5 to -60 dBm, -15 to 55 °C)</b>	Not fully specified	Not specified & requires zero offset below -40 dBm	No specification
Resolution (dB)	Smaller is better	<b>0.01</b>	0.01	0.01 above -50 dBm	0.01
Linearity (dB)		<b>0.04 (-50 to 0 dBm, -15 to 55 °C)</b>	0.06 (-50 to +5 dBm, -5 to 45 °C)	Not specified & requires zero offset below -40 dBm	No specification
Warm-up	Yes is bad	<b>No warm up</b>	<b>No warm up</b>	Yes, below 18 °C	<b>No warm up</b>
User Zeroing required	Yes is bad	<b>No</b>	<b>No</b>	Yes, below -40 dBm	<b>No</b>
Wavelength Sensitivity 30nm	Smaller is better	<b>0.03 dB</b>	No specification	No specification	No specification
Polarisation sensitivity	Smaller is better	<b>&lt; 0.05 dB</b>	No specification	No specification	No specification
Calibration $\lambda$ (nm)	More is better	850, 1300, 1310, 1390, 1490, 1550, 1610, 1625	Accuracy is specified only for 1310 nm	830, 850, 980, 1300, 1310, 1450, 1490, 1550, 1590,1625	850, 1300, 1310, 1490, 1550, 1625
Accuracy at cal condition	Smaller is better	<b>0.09 dB (2%)</b>	0.2 dB (5%) @ 1310 nm only	0.2 dB (5%)	0.3 dB (7%)
Traceable calibration		<b>ILAC/ ISO 17025</b>	No	No	No
Re-calibration cycle	More is better	<b>3 year</b>	3 year	3 years	2 years
<b>General</b>					
Auto $\lambda$ sensing	Yes is better	<b>No</b>	Yes	yes	No
Tone detection Hz for Fiber Identification	More is better	<b>200 - 2500 Hz</b>	270,1k, 2k Hz	270,1k, 2k Hz	270, 330, 1k, 2k Hz
Multi-fiber ID detection	Yes is better	<b>Yes, 12 fiber</b>	No	No	No
Connector adapter type		<b>Interchangeable adapter, including universal types</b>	Universal only	Interchangeable adaptor	<b>Interchangeable adapter, including universal types</b>
Metal free connector	Yes is better	<b>Yes</b>	No	No	No
Max / Min recording	Yes is better	<b>Yes</b>	No	No	No
Display mode		dBm, dB, $\mu$ W	dBm, dB, $\mu$ W	dBm, dB, $\mu$ W	dBm, dB, $\mu$ W
Store reference for each wavelength	Yes is better	Yes	Yes	Yes	Yes
Save test result	Yes is better	<b>Use Display Hold</b>	<b>Yes</b>	No	No
Weight / Volume	Smaller is better	<b>150 gm / 251 cc</b>	200 gm / 360 cc	400 gm / 1017.5 cc	180 gm / 233.5 cc

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Batteries		<b>2x AAA alkaline or re-chargeable</b>	2x AA alkaline or re-chargeable	3x AA batteries	2x AA batteries
Battery life hours	More is better	<b>300 hrs</b>	200 hrs	300 hrs	<b>300 hrs</b>
Automatic power down		<b>Yes (10 min after last key push)</b>	Yes (automatic power off after 20 min)	No specification	Yes (5-minute auto-off)
Operating temperature	Bigger is better	<b>-15 to 55 °C</b>	-10 to 55 °C	-10 to 50 °C	-10 to 50 °C
Storage temperature	Bigger is better	<b>-25 to 70 °C</b>	-40 to 70 °C	-40 to 70 °C	-30 to 60 °C
Warranty year	Longer is better	<b>3~7</b>	1	3	1
PC interface	Yes is better	No	<b>Optional</b>	No	No
LCD with backlight	Yes is better	No	No	No	<b>Yes</b>
Standard accessories		<b>1x SC adapter, 1x carry pouch, ILAC/ISO 17025 Calibration certificate, user quick guide</b>	1x 2.5mm Universal adapter, AA alkaline batteries, operating manual, neck strap, belt bag	User guide, Certificate of Calibration, instrument stickers in four languages, AC adapter, connector adapter (FOA-XX), 3x AA batteries, wrist strap	2.5 mm Universal adapter cap, 2x AA batteries, user's guide, carry case.

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.

