



KI XL SERIES

LARGE AREA DETECTOR OPTICAL POWER METER

The KI 7600, KI 3600 & KI 9600XL series Large Area Detector Optical Power Meters have a large area optical detector up to 5 mm diameter. Typical applications include testing fibre optic communications systems employing multifibre connectors such as MPO and MTRJ, and for large core fibre such as POF, and fiber bundles.

Traceable 1% accuracy, ease of use and high availability combine to achieve superior measurement confidence.

Detector & calibration options cover a wide range of optical connector types, fiber types and wavelengths.

OPTICAL COMMUNICATIONS TEST APPLICATIONS

- ✓ Testing power & attenuation
- ✓ Testing continuity
- ✓ Duplex connectors like MT-RJ
- ✓ Ribbon fiber connectors like MPO
- ✓ Large diameter fiber, eg POF
- ✓ Unusual optical connectors
- ✓ Single mode & multimode fiber
- ✓ Fiber bundles up to 3 mm diameter

FEATURES

- ✓ Detector diameters of 3.6 & 5 mm
- ✓ Industry standard screw-on connector adaptors
- ✓ Traceable calibrations at 6 - 10 wavelengths
- ✓ 3 year warranty & calibration cycle
- ✓ Long battery life
- ✓ Test Tone Detection
- ✓ Max / min recording
- ✓ Compact, rugged and light weight
- ✓ 3 different instrument types with other additional features



WORLD RECOGNISED
TRACEABLE CALIBRATION
Accreditation No 4853



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LARGE AREA DETECTOR OPTICAL POWER METER

The KI XL series Large Area Detector Optical Power Meters measure the absolute and relative light level in multimode and singlemode optical communication systems. High accuracy and simplicity of use make them ideal for field and laboratory use.

A 3.6 mm diameter detector is optimised for testing 1 mm POF and MT-RJ duplex connectors. Additionally, a 5 mm diameter detector can test ribbon fiber connectors with up to 12 fibers in a row, eg MPO connectors up to 2 x 12 fibers, and other large fiber bundles or duplex connectors with an active area up to 3 mm across.

Silicon (Si) detectors are optimised for light in the visible to 1000 nm spectrum making them suitable for POF and most multimode applications. and Germanium (Ge) detectors are optimised for infra-red light up to 1650 nm, making them suitable for multimode and singlemode applications.

The industry standard 7/8" 28 TPI screw on connector interface can also be equipped with almost any connector style.

Operational savings result from the 3 year re-calibration cycle, Up to 1,200 hour battery life, and no range changing delays.

The meters display mW, μW, nW, dB, dBm to 0.01 dB resolution. A separate reference for each λ can be stored and displayed.

Tight total uncertainty specifications cover the entire measuring range, operating temperatures, connector types and fiber types,

The handy tone detector is a useful craft aid for fiber identification. The actual modulation frequency is measured and displayed, so that source modulation rates can be checked.

For general purpose versions of this power meter, or for general features of a particular instrument range, please refer to the general KI7600, KI3600 & KI9600 brochures. Please see other brochures for matching light sources, or complete inspection & test kits.

Please enquire for non standard calibration wavelengths or connector styles

SPECIFICATIONS

P/N	Detector Type, mm	Response λ nm	Damage level dBm	Calibration λ nm	Power Range dBm	Autotest Sensitivity dBm	Mid range linearity ¹ dB	Calibration Accuracy ² %	λ Sensitivity ± 30 nm ³ dB	Polarization Sensitivity dB	Total Uncertainty ^{3,4} dB
KI 7600CXL	5 Ge	600 ~ 1650	+15	780, 850 1300, 1310, 1390, 1490, 1550, 1590, 1610, 1625	+10 ~ -35 +10 ~ -40	-40	0.04	1 %	0.04	< 0.005	0.5
KI 9600XL				780, 850 1300, 1310, 1490, 1550, 1625	+10 ~ -35 +10 ~ -40	N/A		2 %			
KI 7600XL	3.6 Si	350 ~ 1100	+10	635, 650, 660, 750, 850, 980	+5 ~ -60	-40 -40	0.02	1 %	0.03	< 0.005	0.3
KI 3600XL	3.6 Si					N/A		2 %			
KI 9600XL	5 Si					470, 520, 635, 650, 660, 780, 850, 980		N/A			
						typical	typical		typical	typical	max

Note 1: Mid range linearity excludes top 3 dB and bottom 10 dB of range.
 Note 2: Calibration condition: non coherent light, -35±5 dBm, 23±1°C, ±1 nm, 10±3 nm FWHM, PC ceramic connector, 100 μm fiber.
 Note 3: At calibration wavelengths in bold type.
 Note 4: Includes contributions due to: varying optical connector types, calibration uncertainty, full temperature, dynamic range.

GENERAL SPECIFICATIONS

	KI 7600CXL	KI 3600XL	KI 9600XL
Battery Life	360 hrs	1200 hrs	300 hrs
Size	190 x 130 x 70 mm, 7.5 x 5.1 x 2.8"	165 x 120 x 40mm, 6.5" x 4.7" x 1.6"	124 x 81 x 25 mm, 4.9 x 3.2 x 1.0"
Weight	0.5 kg, 1.1 lb. Shipping 1.5 kg, 3.3 lb	0.4 kg, 0.9 lb. Shipping 1.0 kg, 2.2 lb	0.15 kg, 0.33 lb. Shipping 0.5 kg, 1.1 lb
Environmental Case	Operating: -15 to 55 °C . Storage: -25 to 70 °C, Non-condensing Polycarbonate, 1 metre drop tested		
Power	2 alkaline C cells (7.6 A/Hr). External DC or via USB port. Backlit display	2 alkaline C cells (7.6 A/Hr) or 2 AA cells using OPT101 of AA-to-C battery converter	2 alkaline AAA cells. Selectable auto-off, low battery indicator
Tone detection	150 – 9,999 Hz 1 %		200 – 2,500 Hz 1 %
Max / min	Recording feature for stability testing		
Optical Interface	Mounting screw thread 7/8" 28 TPI – UN - 2B		

PRODUCT SELECTION

Feature	Units	Max Core Dia	Typical Application	KI7600CXL-Ge5	KI7600CXL-Si	KI3600XL-Si	KI9600XL-Ge5	KI9600XL-Si5
Autotest			Simultaneous Multi-Wavelength Loss Testing	x	x	x		
USB / KITS™ software			Data acquisition, pass /fail, computer display	x	x			
External Power				x	x			
Backlight				x	x			
5 mm Ge Detector	mm	3	MPO/MT/MTP, most connector styles	x			x	
5 mm Si Detector	mm	3	MPO/MT/MTP, POF, MT-RJ, most connector styles					x
3.6 mm Si Detector	mm	1.6	POF, MT-RJ, most connector styles		x	x		
Response Range	nm			600-1650	350 - 1100	350 - 1100	600-1650	350 - 1100
POF Calibration λ	nm			780	635, 650, 660, 780	635, 650, 660, 780	780	470, 520, 635, 650, 660, 780
MMF Calibration λ	nm			850	850	850	850	850
SMF Calibration λ	nm			1300, 1310, 1390, 1490, 1550, 1590, 1610, 1625			1300, 1310, 1490, 1550, 1625	



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FTTx TELCO / CATV LAN / WAN DEFENCE EDUCATION AUTOMOTIVE



OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

Description	P/N	Description	P/N
ST	OPT202	FC	OPT204
SC	OPT201	LSA/DIN	OPT207
E2000/LSH	OPT220	EC	OPT221
D4	OPT206	MTRJ	OPT223
MU	OPT222	Diamond 3.5mm Threaded	OPT208
Biconic	OPT205	MPO	OPT227
Universal 1.25mm	OPT224	SMA 905/906 ⁵	OPT203
Universal 2.5mm	OPT225	SMI ⁵	OPT231
Toslink ⁵	OPT230	POF cable, mini Toslink, HFBR series, 2.5, 1.25 mm ⁵	OPT229

Adaptors are suitable for both PC and APC polish connectors. Other styles available on request.
 Note 5: Suitable for POF fiber without modification to pin hole. Other adaptors can be modified, but then must be used with a 5 mm detector.

ORDERING INFORMATION

Description	P/N
Large area Ge Power Meter	KI 7600CXL-Ge5 KI 9600XL-Ge5
Large area Si Power Meter	KI 7600CXL-Si KI 3600XL-Si-MP KI 9600XL-Si5

To order Power Meter, specify: instrument + at least one interchangeable adaptor + accessories as required.

STANDARD ACCESSORIES

Description	Quantity		
	KI 7600CXL	KI 3600CXL	KI 9600CXL
Operation manual	1		
NATA (ILAC) traceable calibration certificate	1		
Wrist strap		1	1
Soft carry pouch			1
KITS™ Recording/Reporting software	1		
USB A/B cable	1		
C cell batteries & AA-to-C battery size converter	2		
Batteries	2 C cells		

OPTIONAL ACCESSORIES

Description	P/N
KI 3600 accessory pack includes: Soft pouch, Leather holster, connector cleaner, AA-to-C battery size converter	OPT146
Option, Carry Case for 2 Instruments	OPT153
Option, Carry Case incl Cletop, Cleaning Sticks & Microscope	OPT154

AUTHORIZED DEALER

Technical data is subject to change without notice as part of our program of continuous improvements.



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