

# Optical Power Meter

The KI 3600XL series Optical Power Meter is a special version of the KI 3600, with a **large area optical detector** which is required for some applications. It is typically used for testing fiber optic communications systems

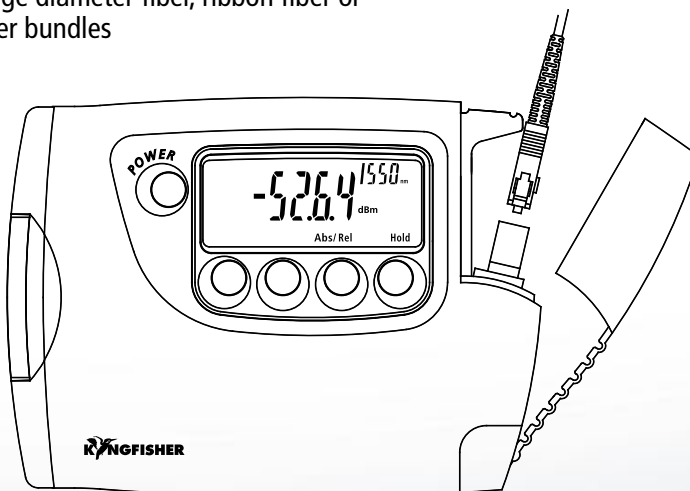
Traceable 3% accuracy, ease of use and high availability combine to achieve superior measurement confidence.

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



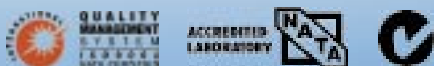
## Optical Communications Test Applications

- Testing duplex connectors like MT-RJ
- Unusual optical connectors
- Very high power measurements
- Large diameter fiber, ribbon fiber or fiber bundles



## Features

- Detector 2 mm  $\phi$  or larger
- Power levels up to +30 dBm
- Autotest compatibility with other instruments
- 3 year warranty
- 3 year calibration cycle
- Industry standard screw-on connector adaptors
- Simple to use
- 1200 hr battery life
- Test Tone Detection
- Max / min recording
- Compact, rugged and light weight



**KI 3600XL Series Optical Power Meter**

# KI 3600XL Optical Power Meter

KI 3600XL SERIES V20040729

The KI 3600XL Optical Power Meter measures the absolute and relative light level in multimode and singlemode optical communication systems. High accuracy and simplicity of use make it ideal for field and laboratory use.

A detector diameter of at least 2 mm can measure light from duplex connectors, large diameter fibers, and high power levels. The industry standard screw on connector interface can also be equipped with almost any connector style.

Autotest provides automatic multiple  $\lambda$  (wavelength) testing when used with an Autotest compatible light source, for easier, faster and more confident testing.

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

The meter displays mW,  $\mu$ W, nW, dB, dBm to 0.01 dB resolution. A separate reference for each  $\lambda$  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.

A Ge detector is ideal for general measurements, with good accuracy at 850 nm. An InGaAs detector has better accuracy, particularly above 1550 nm. A Si detector is cost effective for 850 nm and industrial applications.

Please enquire for non standard calibration wavelengths, connector styles, or detector sizes, which can be up to approximately 4 mm.

For standard general purpose versions of this power meter, please refer to the KI3600 brochure.

## Specifications

Detector Type	Response $\lambda$ nm	Calibration $\lambda$ nm	Power range dBm	Autotest sensitivity dBm	Mid range linearity <sup>1</sup> dB	Calibration Accuracy %	$\lambda$ Sensitivity $\pm 30$ nm <sup>2</sup> dB	Polarisation Sensitivity dB	Total Uncertainty <sup>3</sup> dB
2 mm Ge	600 - 1650	<b>650, 850</b> 1300, 1310, 1390, 1490, 1550, 1590, 1610	+10 to -55 +10 to -60	-45 -50	0.04	3%	0.04	< 0.005	0.5
2mm InGaAs	800 - 1700	<b>850</b> 1300, 1310, 1390, 1490, 1550, 1610	+10 to -65 +10 to -70	-45 -50	0.02	3%	0.03	< 0.005	0.3
2 mm H2 (Ge)	600 - 1650	<b>850</b> 1300, 1310, 1550, 1590, 1610	+30 to -40 +30 to -50	-20 -30	0.04	3%	0.04	< 0.005	0.5
2 mm H3 (InGaAs)	800 - 1700	<b>850</b> 1300, 1310, 1550, 1610	+30 to -40 +30 to -50	-20 -30	0.02	3%	0.03	< 0.005	0.3
2.5 mm Si	350 - 1100	<b>600, 650, 660, 780, 850, 980</b>	+5 to -60	-47	0.02	3%	0.03	< 0.005	0.3
				typical	typical		typical	typical	max

Note 1: Mid range linearity excludes top 3 dB and bottom 10 dB of range. Note 2: At calibration wavelengths in bold type.

Note 3: Includes contributions due to: varying optical connector types, calibration uncertainty, full temperature, dynamic range and fiber type up to 1000  $\mu$ m core diameter.

Battery life	1200 hrs
Size	165 x 120 x 40 mm, 6.5" x 4.7 x 1.6"
Weight	400 gm, 0.9 lb. Shipping 1.7 Kg, 3.7 lb
Operating / Storage	-15 to 55 °C / -25 to 70 °C
Case	Polycarbonate, 1 metre drop tested
Power	2 alkaline C cells (7.6 A/Hr) or 2 AA cells using AA-to-C battery converter. Selectable auto-off, low battery indicator.
Tone Detection	150 - 9999 Hz 1%
Max / Min	Recording feature for stability testing
Damage level	> 5 dB above max reading. H2 & H3 detector > 3 dB above max reading for 2 minutes
Connector Interface	Mounting screw thread 7/8" 28 TPI-UN-2B

## Standard Accessories

Manual, NATA traceable calibration certificate, wrist strap.

## Ordering Information

Instrument	p/n
Large area InGaAs Power Meter	KI 3600XL-InGaAs
Large area Ge Power Meter	KI 3600XL-Ge
Large area H2 Power Meter	KI 3600XL-H2
Large area H3 Power Meter	KI 3600XL-H3
Large area Si Power Meter	KI 3600XL-Si

## Interchangeable Adaptors

ST	OPT202	FC	OPT204
SC	OPT201	LSA/DIN	OPT207
E2000/LSH	OPT220	SMA 905/906	OPT203
D4	OPT206	EC	OPT221
MU	OPT222	MTRJ <sup>1</sup>	OPT223
Biconic	OPT205	Diamond 3.5mm Threaded	OPT208
Universal 1.25mm	OPT224	Universal 2.5mm	OPT225

Adaptors are suitable for both PC and APC polish connectors. Other styles available on request.

Note 1: optimized for KI 3600XL-Si meter

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

## Optional Accessories

KI 3600 accessory pack includes: Soft pouch, Leather holster, 1.25 & 2.5 mm clean stick, connector clean cloth, AA-to-C battery size converter	OPT146
Carry case for 2 instruments	OPT153

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



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