

# KI 2600 SERIES

## HAND HELD FIBER METER



### OPTICAL COMMUNICATIONS TEST APPLICATIONS

- System power testing
- Attenuation testing
- Fiber identification
- Fault Finding & Continuity Testing



Revision 1

A fully-featured Hand Held Optical Power Meter used for testing fiber optic communications systems.

Superior measurement confidence is achieved through a combination of excellent basic accuracy, intuitive use and rugged reliability.

Options cover power levels from +30 to -70 dBm, all useful wavelengths, many connector styles including duplex / ribbon, and large core POF fiber.

### FEATURES

- Reliable, rugged & versatile
- Simple to use
- Long battery life
- LCD is large, clear, sunlight readable & backlit
- Interchangeable connectors with dust cap/tilt bail
- 24 genuine 1% calibration wavelengths
- External power / charger via micro USB port
- Memory with text, timestamp and USB dump
- Simultaneous 3  $\lambda$  loss display with Autotest source
- Flexible real-time PC reporting software
- Multi-Fiber ID tone for fiber identification
- Optional visual fault finder
- Power averaging mode for modulated signal
- Max / Min recording
- 3 year calibration cycle
- 3 ~ 7 year warranty
- Made in Australia

The KI 2600 Hand Held Fiber Meter measures absolute or relative light levels and test tones in fiber optic systems.

Autotest provides fast, easy and automatic multi  $\lambda$  (wavelength) loss testing. Up to 3  $\lambda$  are displayed simultaneously, along with the source nominal power level and  $\lambda$ . Any Kingfisher Autotest light source / LTS with matching  $\lambda$  can be used.

The meter displays mW,  $\mu$ W, nW, dB, dBm to 0.01 dB resolution, with no range changing delays. A separate reference for each  $\lambda$  is stored and displayed. Superior high power performance is achieved.

The tight Total Uncertainty specification covers all power levels, temperatures, connectors and fibers, without warm up or user dark current offset.

Interchangeable connectors are dust and drop protected. SC adaptors are supplied, with others available including small form factor LC styles. Metal free adaptors avoid contamination of connectors in high power systems.

Loss test results can be stored in the large memory, along with a user-input cable name and timestamp. Results can be copied onto a USB memory key with one button push. Alternatively, live readings can be put directly onto a customer report computer using KITS™ customisable Excel-based reporting software. Reports can be easily customized for any terminology, language or format. KITS™ also provides a one-button file dump to a PC with Windows OS.

When used with Multi-Fiber ID sources, the Multi-Fiber ID tone feature uniquely identifies up to 12 fibers, in addition to common test tones.

The VFL (Visible Fault Locator) option offers simple fault finding and continuity testing.

Flexible power options include a choice of batteries, with a jumper selectable battery charger. External power is via USB.

See alternative brochure for special instrument versions with large area or  $\lambda$  selective detectors.

**SPECIFICATIONS**

Response $\lambda$ Nm	Damage level dBm	Calibration $\lambda$ nm	Power range dBm	Tone & Autotest Min dBm	Mid range linearity <sup>1</sup> dB	Calibration Accuracy <sup>2</sup> %	Polarization Sensitivity dB	Total Uncertainty <sup>3</sup> dB	$\lambda$ Sensitivity $\pm 30 \text{ nm}^5$ dB
<b>InGaAs detector</b>									
600 ~ 1700	+15	<b>780, 820, 850, 980</b> <b>1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650</b>	+10 ~ -60 +10 ~ -70	-45 -50	0.02	1 % (0.06 dB)	< 0.005	0.3	0.03
<b>H3B (InGaAs) detector</b>									
800 ~ 1700	+30 <sup>4</sup>	<b>820, 850, 980</b> <b>1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650</b>	+27 ~ -40 +27 ~ -50	-25 -30	0.02	1 % (0.06 dB)	< 0.005	0.35	0.03
<b>Ge detector</b>									
600 ~ 1650	+25	<b>780, 820, 850, 980</b> <b>1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650</b>	+15 ~ -60 +15 ~ -70	-35 -40	0.04	1 % (0.06 dB)	< 0.005	0.5	0.03
<b>Si detector</b>									
350 ~ 1100	+10	<b>470, 520, 635, 650, 660, 780, 850, 980</b>	+5 ~ -70	-50	0.02	1 % (0.06 dB)	< 0.005	0.3	0.03
					typical		typical	max	typical

Note 1: Mid range linearity excludes top 5 dB and bottom 10 dB of range.  
 Note 2: Calibration condition: non coherent light, -35 $\pm$ 5 dBm, 23 $\pm$ 1 $^\circ$ C,  $\pm$ 1 nm, 10 $\pm$ 3 nm FWHM, PC ceramic connector, 100  $\mu$ m fiber.

Note 3: Includes contributions of: varying optical connector types, calibration uncertainty, full temperature, dynamic range and fiber core diameter up to 200  $\mu$ m.  
 Note 4: H3B can sustain the damage level for 2 minutes.  
 Note 5: At calibration wavelengths in bold type.

**VFL SPECIFICATIONS**

Parameters	Value
Output power	-2 $\pm$ 1 dBm
$\lambda$	650 nm
$\lambda$ width	3 nm
Modulation	CW, 2, 270, 1k, 2k Hz

Australian and international patents. Technical data is subject to change without notice as part of our program of continuous improvements. The visible laser is a Class 2 Laser product compliant with IEC60825-1 and 21CFR1040.10.

**GENERAL SPECIFICATIONS**

Parameters	Value
Battery life	300 hrs laser off / 150 hrs laser in blink mode
Size / Weight	190 x 165 x 38 mm (7.5 x 6.5 x 1.5") / 500 gm (1.1 lb). Shipping 1.5 Kg (3.3 lb)
LCD size	74 x 55 mm / 2.9 x 2.2"
Operating / Storage	-15 to 55 $^\circ$ C / -25 to 70 $^\circ$ C
Case	Polycarbonate / rubber, 1 metre drop tested
Tone detection	150 ~ 9900 Hz $\pm$ 1 %
Max / min	Recording feature for stability testing
Power	2 x Alkaline / Lithium AA cells Or 2 x NiMH AA cells, user selectable charging; Ext power input via micro USB; Selectable auto-off, low battery indicator, backlit display
Memory	1900 dual $\lambda$ tests internal & USB memory key
USB interfaces	Micro USB, for general USB & power; USB A type connector, for memory key only



**ORDERING INFORMATION**

Description	P/N
InGaAs Power Meter	KI 2600-InGaAs
InGaAs Power Meter with VFL	KI 2601-InGaAs
H3B Power Meter	KI 2600-H3B
H3B Power Meter with VFL	KI 2601-H3B
Ge Power Meter	KI 2600-Ge
Ge Power Meter with VFL	KI 2601-Ge

Please enquire for non-standard specifications

**STANDARD ACCESSORIES**

Description	Quantity	
	KI 2600 series	KI 2601 series
SC connector adaptor (OPT046)	1	2
Operation manual		1
Calibration certificates		1
Carry Pouch		1
Carry strap		1
KITS™ Recording/Reporting software		1
Option, USB A to USB micro cable (OPT188B)		1

**OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS**

Description	P/N	Description	P/N
FC	OPT051	LC	OPT076
ST	OPT040	MU	OPT080
D4	OPT055	LSA / DIN47256	OPT071
E2000/LSH, green	OPT060G	2.5mm universal	OPT081
E2000/LSH	OPT060	SMA 905/906	OPT082

The power meter works with both PC and APC connectors.

**OPTIONAL ACCESSORIES**

Description	P/N
Option, Carry Case for 2 Instruments	OPT153
Option, Carry Case includes Cletop-style cleaner & Cleaning Sticks	OPT154A

Please visit [kingfisher.com.au](http://kingfisher.com.au) for a wide range of FiberTester kits.

AUTHORISED DEALER

