

KI 2600 SERIES

HAND HELD FIBER METER



OPTICAL COMMUNICATIONS TEST APPLICATIONS

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



Revision 13

FEATURES

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 +33 to -70 dBm, all useful wavelengths, many connector styles including duplex / ribbon, and large core POF fiber.

- Reliable, rugged & versatile
- Simple to use
- Very 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 λ 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 λ (wavelength) loss testing. Up to 3 λ are displayed simultaneously, along with the source nominal power level and λ . Any Kingfisher Autotest light source / LTS with matching λ can be used.

The meter displays mW, μ W, nW, dB, dBm to 0.01 dB resolution, with no range changing delays. A separate reference for each λ 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™ customizable 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 detectors up to + 33 dBm.

SPECIFICATIONS

Response λ nm	Damage level dBm	Calibration λ nm	Power range dBm	Tone & Autotest Min dBm	Mid range linearity ¹ dB	Calibration Accuracy ² %	Polarization Sensitivity dB	Total Uncertainty dB ^{3,5}	λ Sensitivity $\pm 30 \text{ nm}^5$ dB
InGaAs detector									
600 ~ 1700	+15	780, 820, 850, 980 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+10 ~ -60 +10 ~ -70	-45 -50	0.02	1 % (0.06 dB)	< 0.005	0.3	0.03
H5 (InGaAs) detector									
800 ~ 1700	+27 ⁴	820, 850, 980 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+24 ~ -50 +24 ~ -60	-35 -40	0.02	1 % (0.06 dB)	< 0.005	0.35	0.03
Ge detector									
600 ~ 1650	+25	635, 650, 660, 780, 820, 1590, 1610, 1625, 1650 850, 980, 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570	+15 ~ -50 +15 ~ -60	-40 -50	0.04	1 % (0.06 dB)	< 0.005	0.5	0.03

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°C, \pm 1 nm, 10 \pm 3 nm FWHM, PC ceramic connector, 100 μ m fiber.

typical typical max typical
Note 3: Includes contributions of: varying optical connector types, calibration uncertainty, full temperature, dynamic range and fiber core diameter up to 200 μ m.

Note 4: H5 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
λ	650 nm
λ 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 1 Laser product compliant with IEC60825-1 and 21CFR1040.10.

GENERAL SPECIFICATIONS

Parameters	Value
Battery life	Up to 1000 hrs laser & backlit off / 200 hrs laser in blink mode
Size / Weight	190 x 105 x 35 mm (7.5 x 4.1 x 1.4") / 420 gm (0.9 lb). Shipping 1.5 Kg (3.3 lb)
LCD size	74 x 55 mm / 2.9 x 2.2"
Operating / Storage	-15 to 55 °C / -25 to 70 °C
Relative humidity	0 ~ 95 %
Case	Polycarbonate / rubber edges & corners, moisture resistance, 1 metre drop tested
Dust cap	Captured, functions as tilt bail when slid open
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	999 four λ tests with date & time in internal memory, unlimited on 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
H5 Power Meter	KI 2600-H5
H5 Power Meter with VFL	KI 2601-H5
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 (OPT149)	1	
Carry strap	1	
KITS™ Recording/Reporting software	1	
Option, USB A to USB micro cable	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	1.25mm universal	OPT084
E2000/LSH	OPT060	2.5mm universal	OPT081
		SMA 905/906	OPT082

The power meter works with both PC and APC connectors.

OPTIONAL ACCESSORIES

Description	P/N
Carry Case for 2 Instruments	OPT153
Carry Case includes Cletop-style cleaner & Cleaning Sticks	OPT154B

Please visit kingfisherfiber.com for a wide range of FiberTester kits.

AUTHORISED DEALER



Kingfisher International Pty Ltd
30 Rocco Drive, Scoresby VIC 3179 Australia

T +61 3 9757 4100
F +61 3 9757 4193
E sales@kingfisher.com.au
W kingfisherfiber.com

