KI 2600 Series Hand Held Fiber Meter

Optical Communications Test Applications

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



Revision 27

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.

Features

- Reliable, rugged & versatile
- Simple to use
- Very long battery life
- LCD is large, clear, sunlight readable & backlit
- Interchangeable connectors with dust cap/tilt bail
- Up to 25 genuine 1% traceable calibration wavelengths
- External power / charger via USB port
- Memory with text, timestamp, and USB dump
- Simultaneous 3 $\boldsymbol{\lambda}$ 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
- ISO 17025 traceable calibration certificate
- External power / charging via USB
- 3 years warranty
- 3 years recommended calibration cycle
- Made in Australia





KI 2600 Series - Hand Held Fiber Meter

The KI 2600 Handheld 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 6 λ , with up to 3 λ displayed simultaneously, along with the respective source nominal power levels. 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.

Unique in the industry, the tight Total Uncertainty specification covers all power levels, temperatures, connectors, and fibers, without warm up or user dark current offset. Calibration is ISO 17025 traceable.

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.

Two high-power detector options are provided, H5 for typical high-power systems, and H6 for specialized laboratory testing on SMF. Both detector options use innovative attenuation devices to achieve superior test accuracy.

See alternative brochure for instrument versions with large area detectors up to +33 dBm. For use with e.g., ribbon fiber, MPO/MT/MTP and MTRJ, large core fiber such as POF, fiber bundles, high power pump lasers, other general optical applications etc.

SPECIFICATIONS

Response λ nm	Damage level dBm	Calibration λ nm	Power range dBm	Tone ⁶ & Autotest Min dBm	Midrange linearity ¹ dB	Calibration Accuracy ² %	Polarization Sensitivity ⁵ dB	λ Sensitivity ± 30 nm ⁴ dB
InGaAs dete	InGaAs detector							
		780, 820, 850, 980	+10 ~ -60	-40				
600 ~ 1700	+15	1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+10 ~ -70	-50	0.04	1 % (0.06 dB)	< 0.05	0.2
H5 (InGaAs)	detector							
. ,		820, 850, 980	+24 ~ -50	-30				
800 ~ 1700	+27 3	1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+24 ~ -60	-40	0.04	1 % (0.06 dB)	< 0.05	0.2
H6 (InGaAs) detector (Corning SMF-28e fiber & PC or APC polish connector)								
800 ~ 1700	+333	1310, 1480, 1550, 1610	+33 ~ -47	-20	0.04	5 % (0.21 dB)	< 0.05	0.2
					typical		typical	typical
Note 1: Mid-range linearity @ 1550 nm for InGaAs, or 850 nm for Si. Non-coherent light, with APC connector. Excludes top 5 dB and bottom 10 dB of range.				No	Note 4: @ calibration wavelengths in bold type. Note 5: For APC connector only.			

Note 2: Calibration condition: non-coherent light, -35 \pm 5 dBm, 23 \pm 3°C, \pm 0.5 nm, 20 \pm 3 nm FWHM, PC ceramic connector, 50 μ m fiber. For H6 detector: SMF & laser, 0 dBm, 23 \pm 3°C, \pm 20 nm.

Note 3: H series can sustain high power input level for 2 minutes, to avoid over-heating.





Note 6: For Tone detection up to 1000 Hz.

VFL SPECIFICATIONS

Parameters	Value
Output power	+2 ± 1 dBm
Wavelength	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 IEC60825-2 and 21CFR1040.10.

GENERAL SPECIFICATIONS

Parameters	Values
Battery life	Up to 1000 hours laser & backlit off / 200 hours 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-meter drop tested
Dust cap	Captive, functions as tilt bail when slid open
Tone detection	150 ~ 9900 Hz ± 1 %
Max / min Power	Recording feature for stability testing 2 x Alkaline / Lithium AA cells or 2 x NiMH AA cells, user selectable charging; Ext power input via micro-USB or USB-C depending on instrument version; Selectable auto- off, low battery indicator, backlit display
Memory	1000 4- λ tests with date & time in internal memory, unlimited on USB memory key
USB interfaces	Micro-USB or USB-C type connector depending on instrument version for general USB & power; USB-A type connector for memory key only
Warranty	3 years
Recommended calibration cycle	3 years

ORDERING INFORMATION

Description	Part Number	
Instrument, Power Meter InGaAs	KI2600-InGaAs	
Instrument, Power Meter InGaAs, VFL	KI2601-InGaAs	
Instrument, Power Meter H5	KI2600-H5	
Instrument, Power Meter H5, VFL	KI2601-H5	
Instrument, Power Meter H6	KI2600-H6	
Instrument, Power Meter H6, APC	KI2600-H6-APC	

Please enquire for non-standard specifications





STANDARD ACCESSORIES

	Quantity		
Description	KI 2600 series	KI 2601 series	
SC connector adaptor (OPT046)	1	2	
Operation manual		1	
QA certificates	1		
ILAC/ NATA traceable calibration certificate	1		
Carry pouch (OPT149)	1		
Carry strap	1		
USB cable (USB-A to Micro-USB or USB-A to USB-C)	1		
KITS™ Recording/Reporting software	Download from website for free		

OPTIONAL ACCESSORIES

Description	Part number
Option, Carry Case, Kl2x/Kl7x/Kl3x, small (Carry Case for 2 Instruments)	OPT153-CASE*
Option, Carry Case, Cletop, Cleaning Sticks, Kl2x / Kl9x, large	OPT1548*

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

OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

Description	Part number	Description	Part number
Option, Hybrid Adaptor, Ceramic Sleeve, SC/FC	OPT051	Option, Hybrid Adaptor, Ceramic Sleeve, SC/E2000	OPT060
Option, Hybrid Adaptor, Ceramic Sleeve, SC/LC, metal body	OPT076	Option, Hybrid Adaptor, Ceramic Sleeve, SC/E2000 Green	OPT060G
Option, Hybrid Adaptor, Ceramic Sleeve, SC/ST	OPT040	Option, Hybrid Adaptor, Ceramic Sleeve, SC/Universal 1.25 mm	OPT085
Option, Hybrid Adaptor, Ceramic Sleeve, SC/D4	OPT055	Option, Hybrid Adaptor, Ceramic Sleeve, SC/Universal 2.5 mm	OPT081
Option, Hybrid Adaptor, Ceramic Sleeve, SC/MU	OPT080	Option, Hybrid Adaptor, Metal Sleeve, SC/SMA 905/906	OPT082
Option, Hybrid Adaptor, Ceramic Sleeve, SC/LSA- DIN47256	OPT071	Option, Hybrid Adaptor, Ceramic Sleeve, SC/F3000 or LC Simplex, plastic body	OPT072
Option, Hybrid Adaptor, POF Multi-connector	OPT077	Option, Hybrid Adaptor, HFBR	OPT078

The power meter works with both PC and APC connectors.



AUTHORIZED DEALER



 Kingfisher International Pty Ltd
 T
 +61 3 8544 1700

 720 Springvale Road, Mulgrave
 F
 +61 3 8544 1793
VIC 3170 Australia

E sales@kingfisher.com.au

kingfisherfiber.com