KI 2600 Series

Hand Held Fiber Meter

Optical Communications Test Applications

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

Revision 20

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
- 28 genuine 1% traceable 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
- ISO 17025 traceable calibration certificate
- External power / charging via USB
- 3 ~ 7 Year warranty
- Made in Australia

KINGFISHER INTERNATIONAL

Worldwide recognised accuracy and quality

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, µW, 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.

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 & Autotest Min dBm	Midrange linearity[1] dB	Calibration Accuracy[2] %	Polarization Sensitivity[6] dB	Total Uncertainty dB [3, 5]	λ Sensitivity ± 30 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	0.04	1 % (0.06 dB)	< 0.05	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	0.04	1 % (0.06 dB)	< 0.05	0.35	0.03
Ge detector									
600 ~ 1650	+25	*635, 650, 660, 780, 820, 1590, 1610, 1625, 1650* 850, 880, 910, 940, 980, 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, *1510, 1530, 1550, 1570*	*+15 ~ -50* +15 ~ -60	*-40* -50	0.06	1 % (0.06 dB)	< 0.05	0.5	0.03
					typical	typical	max	typical	

Note 1: Mid-range linearity @ 1550 nm for InGaAs & Ge, or 850 nm for Si. Non-coherent light, with APC connector. Excludes top 5 dB and bottom 10 dB of range.

Note 2: Calibration condition: non-coherent light, -35±5 dBm, 23±3°C, ±1 nm, 10±3 nm FWHM, PC ceramic connector, 100 µm fiber.

Note 3: Includes contributions of: varying optical connector types, calibration uncertainty, linearity over temperature & range, and fiber core diameter up to 200 µm.

Note 4: H5 can sustain the damage level for 2 minutes.

Note 5: At calibration wavelengths in bold type.

Note 6: For APC connector only.

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 IEC60825-1 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	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	1000 4-λ tests with date & time in internal memory, unlimited on USB memory key
USB interfaces	USB-micro type connector for general USB & power; USB-A type connector for memory key only
Warranty	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 Ge	KI2600-Ge
Instrument, Power Meter Ge, VFL	KI2601-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	
QA certificates	1	
ILAC/ NATA traceable calibration certificate	1	
Carry Pouch (OPT149)	1	
Carry strap	1	
USB-A to USB-micro type cable	1	
KITS™ Recording/Reporting software	Download from website for free	

OPTIONAL ACCESSORIES

Description	Part number
Option, Carry Case, KI2x/KI7x/KI3x, small (Carry Case for 2 Instruments)	OPT153*
Option, Carry Case, Cletop, Cleaning Sticks, KI2x / KI9x, large	OPT154B*

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	OPT084
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

The power meter works with both PC and APC connectors.

AUTHORIZED DEALER