KI 9600A Series Pocket Fibre Power Meter

The KI 9600A series Optical Power Meter is used for testing fibre optic communications systems.

2% calibration accuracy, ease of use and high availability combine to achieve superior measurement confidence.

Detector & calibration options cover a wide range of connector types, fibre types, common wavelengths and power levels from +24 to -60 dBm.

Applications

- System power testing
- Attenuation testing
- Fibre identification
- Wavelength Selective Option for PON

KINGFISHER INTERNATIONAL

Features & Benefits

- Shirt pocket size with spring clip
- 3 year warranty
- 3 year calibration cycle
- Patented low cost Interchangeable connector
- Multi-fibre ID for fibre identification
- Large sunlight readable display
- Displays dBm, dB, linear, tone Hz
- Power averaging mode for modulated signal
- Limited Feature mode for low skill measurement
- Simple to use
- 300 hr battery life
- Max / Min recording & display hold
- 9 calibrated wavelengths
- Compact, rugged & light weight
- Made in Australia

For further information:
www.fibreoptic.com.au
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FOS Fibre Optic Systems

The small KI 9600A Pocket Fibre Meter is ideal for measuring absolute/relative light levels or test tones on single mode, multimode or plastic optical fibre (POF) systems. High traceable accuracy and ease of use make it perfect for field or laboratory.

Tough construction includes moisture resistance, rubber corners, a captive connector dust cap and it can be dropped over 2 meters onto a hard surface. This instrument meets MIL PRF 28800F Class 2.

When used with multiple KI 9800 sources, the Multi-Fibre ID feature uniquely identifies up to 12 fibres.

The tight total uncertainty specification covers the entire range of measurement, temperature, connectors and fibre types, without warm up or dark current offset. Calibration is fully traceable.

Operational savings come from a 3 year warranty & re-calibration cycle, 300 hr battery life, and fast operation.

The meter displays mW, µW, nW, dB, dBm to 0.01 dB resolution. A separate reference for each λ can be stored.

A Power Averaging Mode measures the average power of modulated signals.

A Limited Feature Mode enables a site manager to lock and track instrument settings to reduce measurement skill, and improve both test confidence and traceability.

Interchangeable optical connectors are dust and drop protected. Other styles include the popular LC.

The InGaAs meter is the preferred solution for single mode testing from 900 – 1650 nm.

Ge meters offer modest accuracy from 660 to 1550 nm.

H series meters are available for high power testing. They offer good immunity to wavelength and reflection effects.

For PON testing, the Wavelength Selective meter KI 9600WS01-Ge offers a simple way to measure 1550 nm light only.

For testing 1 mm POF, ribbon fibre, MT-RJ, expanded beam connectors etc, refer to the alternative KI 9600-XL brochure for instruments with large area detectors.

Technical Specifications

Response wavelength (nm)	Damage level (dBm)	Calibration wavelength (nm)	Power range (dBm)	Tone & multi fibre ID sensitivity (dBm)	Mid range linearity (dB) [1]	Calibration accuracy (%) [2]	Polarization insensitivity (dB)	Total uncertainty (dB) [3,5]	Wavelength sensitivity ± 30 nm [5] dB
InGaAs detector									
600 ~ 1700	+15	660, 850 **1300, 1310, 1390, 1490, 1550, 1610, 1625**	+5 ~ -60	-40 -50	0.02	2 % (0.09 dB)	< 0.005	0.3	0.03
H3B (InGaAs) detector									
800 ~ 1700	+27 [4]	850 **1300, 1310, 1390, 1490, 1550, 1590, 1610, 1625**	+24 ~ -40	-20 -30	0.02	2 % (0.06 dB)	< 0.005	0.3	0.03
H5 (InGaAs) detector									
800 ~ 1700	+25	850 **1300, 1310, 1390, 1490, 1550, 1590, 1610, 1625**	+15 ~ -50	-30 -40	0.02	2 % (0.06 dB)	< 0.005	0.3	0.03
Ge detector									
600 ~ 1650	+15	635, 650, 660, 780, 1610, 1625 **850, 1300, 1310, 1390, 1490,** 1550	+10 ~ -60	-40 -50	0.04	2 % (0.09 dB)	< 0.005	0.5	0.03
KI9600WS01-Ge detector[6]									
1530 ~ 1625	+15	**1550**	+10 ~ -70	NA	0.04	NA	< 0.005	0.5	NA

Note 1: Mid range linearity excludes top 5 dB and bottom 10 dB of range.
Note 2: Calibration condition: non coherent light, -35±5 dBm, 23±1°C, ±1 nm, 10±3 nm FWHM, PC ceramic connector, 100 um fibre.
Note 3: Includes contributions of: varying optical connector types, calibration uncertainty, full temperature, dynamic range and fibre core diameter up to 200 um.
Note 4: H3B can sustain the damage level for 2 minutes.
Note 5: At calibration wavelengths in bold type.
Note 6: Isolation of 1490 nm pass band: >25 dB, Isolation of 1310 nm pass band: >30dB

General Specifications

Battery life	300 hours, typical
Size WxHxD (mm)	124 x 81 x 25
Weight unit/shipping (kg)	0.15 / 0.5
Case material	Polycarbonate
Physical resistance	2.5m drop test
Operating temp (°C)	-15 to 55
Storage temp (°C)	-25 to 70
Relative humidity (%)	0 ~ 95
Calibration cycle (years)	3
Tone detection (Hz)	200 ~ 2500 ±2%
Power	2 Alkaline AAA cells, selectable auto-off, low battery indicator
Min-max	Recording feature for stability testing
Standard accessories excludes	SC adapter (power meter suits both PC and APC connections), quick guide, soft carry pouch, wrist strap & calibration certificate

Note: *A range of optional accessories availble. Contact FOS for details.*

Ordering Information

Description	Part number
KI 9600A Series	
Instrument, Power Meter InGaAs	KI 9600A-InGaAs
Instrument, Power Meter H3B	KI 9600A-H3B
Instrument, Power Meter H5	KI 9600A-H5
Instrument, Power Meter Ge	KI 9600A-Ge
Instrument, Power Meter Ge, 1550nm	KI 9600WS01-Ge

Please enquire for non-listed specification.