



KI 3800 SERIES

OPTICAL LIGHT SOURCE

The KI 3800 series Optical Light source is used to test loss in optical fiber systems, at 1 to 2 wavelengths.

High productivity, high stability, high availability and ease of use combine to achieve superior measurement confidence.

OPTICAL COMMUNICATIONS TEST APPLICATIONS

- ✓ Singlemode, multimode or POF cable testing
- ✓ General testing & maintenance

FEATURES

- ✓ Compact, rugged & light weight
- ✓ Autotest compatibility with other instruments
- ✓ Mode controlled multimode sources
- ✓ Interchangeable connectors including SFF styles
- ✓ Excellent optical power stability
- ✓ Excellent re-connection repeatability
- ✓ Very long battery life
- ✓ Low skill operation
- ✓ Optical test tone generator
- ✓ Multimode sources come with 50 & 62.5 μm fiber mandrel wraps
- ✓ Out-of-band (1650 nm) testing
- ✓ 3 year calibration cycle
- ✓ 3 ~ 7 year warranty
- ✓ Made in Australia





KI 3800 SERIES

OPTICAL LIGHT SOURCE

The KI 3800 Optical Light Source is used with an Optical Power Meter for loss testing on single mode, multimode or plastic optical fiber (POF) cable.

When used with an Autotest compatible Power Meter or Loss Test Set, one button automated multi-wavelength loss testing is achieved.

The test tone function can be used with a compatible Power Meter or clip on identifier for fiber detection, continuity testing, fault finding and route location.

Re-connection repeatability is < 0.1 dB, resulting in exceptional practical source stability.

Tough construction includes general moisture resistance, rubber corners and proven ability to withstand drops of over 2 meters onto a hard surface.

The optical connector adaptor is easily changed as required, and is protected with a captive dust cap. This instrument meets the general requirements of MIL PRF 28800F class 2.

The long battery life of nearly 15 working weeks eliminates the requirement for rechargeable batteries and time consuming re-charging procedures.

Interchangeable optical connectors work for both 1.25 mm and 2.5 mm connectors. Instruments come with 3 popular connector adaptor styles.

Metal free adaptors avoid contamination of connectors in high power systems. (Not for KI 3809)

Single or dual λ laser sources are ideal for single-mode testing, in combination with the KI 3600 series of power meters.

Single or dual λ LED sources are ideal for multimode testing, in combination with the KI 3600 series of power meters. They feature standards compliant beam geometry & modal distribution across the fiber core, resulting in better test consistency when different sources are used to test the same sample.

The 650 / 660 nm LED source option is ideal for POF testing, in combination with the KI 3600XL series of power meters. This source has a fixed SMA connector and comes with a 1 mm core SMA/SMA patch lead, so a suitable adaptor lead can be made up by the user.

The 850 nm VCSEL source may be used for multimode fiber testing, in combination with the KI 3600 series of power meters. VCSEL sources give poor measurement stability, and so should only be used if required.

Other Kingfisher power meters provide additional features such as memory or data logging.

SPECIFICATIONS

	1310/1550 nm Laser	Other Laser	850 nm VCSEL	850 / 1300 nm LED	660 nm LED	Comments
Output Power, dBm	0	-4	-2	-20 @ 62.5/125	-6	\pm 1 dB for emitters
Fiber Type, mm	@ 9/125	@ 9/125	@ 50/125	-32 @ 9.5/125	@ 1000 POF	\pm 3 dB for 850/1300 nm LED
Short term stability, dB	0.04 ¹	0.06 ¹	0.12 ¹	0.01	0.01	For 15 min, typ \pm D 2°C, after warm up
Stability over temp, dB	0.6	0.6	0.8	0.35	0.35	Typical, over temperature
λ initial tolerance, nm	20	20	20		5	At 25 °C
λ width, nm	3	< 1	< 1		10	FWHM, typical
λ nm/°C	0.4	0.1	0.1	0.4	NA	Typical
Mode Controlled Source	NA	NA	Mode controlled ²		NA	
Reconnection repeatability, dB	0.1			0.05		95% confidence
Modulation	270 Hz, 1 KHz, 2 KHz, \pm 2 %					
Laser output	Adjustable over 3 dB in 0.05 dB steps					

Note 1) ORL < -25 dB. Note 2) Multimode source mode distribution @ 50/125 is compliant with the following standards: IEC 61280-4-1 [Ed.1.0], TIA/EIA 526-14A and TIA TSB-178.

GENERAL SPECIFICATIONS

Battery life	600 hrs at Autotest
Size	165 x 120 x 40 mm, 6.5" x 4.7" x 1.6"
Weight	350 gm, 0.8 lb. Shipping 0.7 Kg, 1.5 lb
Operating	-15 to 55 °C
Storage	-25 to 70 °C
Case	Polycarbonate, 1 meter drop tested
Power	2 alkaline C cells (7.6 A/Hr). AA size batteries accommodated. Selectable auto-off, low battery indicator.

OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

Description	P/N	Description	P/N
D4	OPT055	LC / F3000	OPT072
E2000/LSH, green	OPT060G	MU	OPT080
E2000/LSH	OPT060	SMA 905/906	OPT082
LSA / DIN47256	OPT071		

This instrument is supplied with metal-free optical interchangeable connector adaptors. The source ferrule type is fixed and customer specified as either PC or APC. Blue is associated with PC. Green is associated with APC.

OPTIONAL ACCESSORIES

Carry case for 2 instruments	OPT153
Carry case for 2 Instruments, Compartments for Microscope, Visual Fault Locator, connector cleaning materials, batteries, test leads and mandrel wraps	OPT154
KI 3000 accessory pack, it includes: Soft pouch, Leather holster, 1.25 & 2.5 mm clean stick, connector clean cloth, AA-to-C battery converter	OPT146

AUTHORIZED DEALER

ORDERING INFORMATION

Please enquire for warranty extension options, traceable calibration services, non-standard connectors, wavelengths, and other specifications.

Instrument	Ports	P/N
Instrument, Source 660 nm LED, 1 mm POF, fixed SMA, Blister Pack	1	KI 3809-MP
Instrument, Source 850 nm LED, Blister Pack	1	KI 3810B-MP
Instrument, Source 850-1300 nm LED, Blister Pack	1	KI 3812B-MP
Instrument, Source 1310 nm Laser, Blister Pack	1	KI 3820B-MP
Instrument, Source 1310-1550 nm Laser, Blister Pack	1	KI 3822B-MP
Instrument, Source 1310-1550 nm Laser, APC, Blister Pack	1	KI 3822B-APC-MP
Instrument, Source 1490-1550 nm Laser, Blister Pack	1	KI 3818B-MP
Instrument, Source 1490-1550 nm Laser, APC, Blister Pack	1	KI 3818B-APC-MP
Instrument, Source 1550-1650 nm Laser, Blister Pack	1	KI 3823B-MP
Instrument, Source 1550-1650 nm Laser, APC, Blister Pack	1	KI 3823B-APC-MP
Instrument, Source 850nm VCSEL, Blister Pack	1	KI 3840B-MP

Note: standard 3 year warranty for instrument only. Promotion P/N is bolded

STANDARD ACCESSORIES

Description	KI3809-MP	Others
SC connector adaptor OPT046 blue or OPT046G green		1
FC connector adaptor OPT051		1
ST connector adaptor OPT040		1
Fixed SMA connector	1	
Operation manual		1
50 & 62.5 μ m fiber mandrel wraps for LED source (OPT701)		1
OPT710 (Patchcord SMA-SMA, POF 1mm, simplex, 4 m)	1	

Australian and international patents. Technical data is subject to change without notice as part of our program of continuous improvements. Class 1 Laser/ LED product, complies IEC60825-1 and 21CFR1040.10.



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

0110-V21

FTTx

TELCO / CATV

LAN / WAN

DEFENCE

EDUCATION

AUTOMOTIVE