

KI 9800A SERIES

OPTICAL LIGHT SOURCE



OPTICAL COMMUNICATIONS TEST APPLICATION

- Single mode, multimode or POF cable loss testing
- Continuity testing
- Visual Fault Finder option
- General testing & maintenance



Revision 12

FEATURES

The KI 9800A series Pocket Fiber Source is used to test loss and multi-fiber continuity in optical fiber systems, at 1 to 3 wavelengths.

High productivity, high stability, rugged construction and ease of use combined to achieve superior measurement confidence.

- Rugged shirt-pocket size with spring clip
- Autotest compatibility with other instruments
- 3 year warranty
- Long battery life
- Low skill operation
- Interchangeable connectors including SFF styles
- Multi-Fiber ID tone source feature
- Mode controlled multimode sources
- Limited Feature mode for low skill measurement
- High power, long distance VFL, approx 8 ~ 9 km
- Excellent optical power stability
- Excellent re-connection repeatability
- Large sunlight readable display
- Made in Australia

The KI 9800A Pocket Fiber Source is used with an Optical Power Meter for loss testing on single mode, multimode or plastic optical fiber (POF) cable.

Tough construction includes general moisture resistance, rubber corners and proven ability to withstand drops of over 2 meters onto a hard surface. It meets the general requirements of MIL PRF 28800F Class 2.

Interchangeable optical connectors are dust and drop protected. SC adaptor is supplied; other styles include the popular LC. Use of metal free adaptors avoids contamination of connectors in high power systems. (exclude KI 9809)

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.

When used with a KI 9600 Power Meter, multiple sources can positively identify up to 12 fibers at a time, using the Multi-Fiber ID feature.

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

1310 / 1490 / 1550 nm laser sources are ideal for single-mode

testing, in combination with the KI 9600 power meters.

850 / 1300 nm LED sources are ideal for multimode testing, in combination with the KI 9600 power meters. They meet the Encircled Flux (EF) standard compliance, and provide the most consistent and reliable testing results.

The 650 / 660 nm LED source option is ideal for POF testing, in combination with the KI 9600XL 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. It gives poor measurement stability, and so should only be used if required.

The 635 nm laser VFL Visual Fault Locator with Class 2 eye safety is optimised for short distance applications.

The 650 nm laser VFL Visual Fault Locator with Class 2M eye safety is optimised for long distance applications.

Both VFL offer improved eye safety with interchangeable connector, tone / wink function, rugged case and AAA batteries.

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.

SPECIFICATIONS

	1310/1550 nm Laser	1310/1490/1550 nm Laser	635 nm Laser	650 nm Laser	850 nm VCSEL	850 / 1300 nm LED	660 nm LED	Comments
Power (dBm) @ Fiber Type(μm)	0 @ 9/125	-4 @ 9/125	-2 @ 9/125	+7 @ 9/125	-2 @ 50/125	-20 @ 62.5/125 -22 @ 50/125 -32 @ 9.5/125	-6 @ 1000 POF	± 1 dB
Short term stability (Db)	0.04 ¹	0.06 ¹	N/A	N/A	0.12 ¹	0.01	0.01	For 15 min, typ ± Δ 2°C, after warm up
Stability over temp (dB)	0.6	0.6	N/A	N/A	0.8	0.35	0.35	Typical, over temperature
λ initial tolerance (nm)	20	20	5	15	20	NA	5	At 25 °C
λ width, nm	3	< 1	3	3	< 1	NA	NA	FWHM, typical
λ nm/°C	0.4	0.1	0.1	0.1	0.1	0.4	NA	Typical
Mode Controlled Source	NA	NA	NA	NA	Mode controlled ²		NA	
Reconnection repeatability (dB)	0.1	0.1	0.1	0.1	0.1	0.05	NA	95 % confidence
Modulation	270 Hz, 1 kHz, 2 kHz ± 2 %							
Blinking 2 Hz	NA	NA	Yes	Yes	NA	NA	Yes	
Laser output	Adjustable over 3 dB in 0.1 dB steps				NA	NA	NA	

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

Parameters	Value
Battery life	Laser/LED source: 40/35 hours in Autotest, typical
Size	124 x 81 x 25 mm / 4.9 x 3.2 x 1.0"
Weight	0.15 kg / 0.33 lb. Shipping 0.5 kg / 1.1 lb
Operating / Storage Case	-15 to 55 °C / -25 to 70 °C
Power	Polycarbonate, 2.5 metre drop tested
Multi-fiber ID	2 Alkaline AAA cells. Selectable auto-off, low battery indicator
	Up to 12 fibers

Australian and international patents. Technical data is subject to change without notice as part of our program of continuous improvements.

Class 1 or 2 Laser / LED infra red device. 650 nm VFL is Class 2M. Warning! Eye hazard if viewed with magnifying device. Compliant with IEC60825-1 and 21CFR1040.10.

ORDERING INFORMATION

Please enquire for non-standard:

Connectors, APC etc

Laser / LED wavelengths

Description	P/N
Instrument, VFL, 635 nm Laser, PC	KI 9807A
Instrument, Long distance VFL, 650 nm Laser, PC	KI 9808A
Instrument, Source 660 nm LED, 1 mm POF, fixed SMA	KI 9809A
Instrument, Source 850-1300 nm LED, PC	KI 9812A
Instrument, Source 1310-1550 nm Laser, PC	KI 9822A
Instrument, Source 1310-1490-1550 nm Laser, PC	KI 9827A
Instrument, Source 850nm VCSEL, PC	KI 9840A

STANDARD ACCESSORIES

Description	Quantity	
	KI 9809	Others
SC connector adaptor OPT046 blue or OPT046G green		1
Fixed SMA connector	1	
Option, Patchcord SMA-SMA, POF 1mm, simplex, 4 meter (OPT710)	1	
Quick guide		1
50 & 62.5 μ m fiber mandrel wraps OPT701 for LED source		1

OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

Description	P/N	Description	P/N
D4	OPT055	LC	OPT076
E2000/LSH, green	OPT060G	MU	OPT080
E2000/LSH	OPT060	SMA 905/906	OPT082
LSA / DIN47256	OPT071		

This instrument is supplied with metal-free sleeve optical interchangeable connector adaptors. The power meter works with both PC and APC connectors. The visible laser connector ferrule type is fixed and customer specified as either PC or APC. Green is associated with APC.

OPTIONAL ACCESSORIES

Description	P/N
Option, accessories pack KI9000, includes:	OPT148
1) ST metal-free interchangeable connector adaptor (OPT040)	1
2) FC metal-free interchangeable connector adaptor (OPT051)	1
3) Operation manual on CD	1
Soft carry pouch	1
AAA alkaline batteries	2

AUTHORISED DEALER



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