KI 9800A
Series
Pocket Fibre
Light Source



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

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

Applications

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





Features & Benefits

- 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-Fibre 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



KI 9800A Series Pocket Fibre Light Source

The KI 9800A Pocket Fibre Source is used with an Optical Power Meter for loss testing on single mode, multimode or plastic optical fibre (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 adapter is supplied; other styles include the popular LC. Use of metal free adapters 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 fibre detection, continuity testing, fault finding and route location.

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

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

 $1310 \, / \, 1490 \, / \, 1550 \, / \, 1625$ 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 adapter lead can be made up by the user.

The 850 nm VCSEL source may be used for multimode fibre testing. It gives poor measurement stability, and so should only be used if required.

The 635 nm laser VFL Visual Fault Locator with Class 1 eye safety is optimized for short distance applications.

The 650 nm laser VFL Visual Fault Locator with Class 2M eye safety is optimized 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.

Technical Specifications

	1310 or 1310/1550 nm Laser	1310/1625 nm laser	1310/1490 /1550 nm Laser	1310/1550 /1625 nm Laser	635 nm Laser	650 nm Laser	850 nm VCSEL	850/1300 nm LED	660 nm LED	Comments
KI 9800A Series										
Power (dBm) @ fibre type(um)	0 @ 9/125	0 @ 9/125	-4 @ 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	0.06	0.04	0.06	NA	NA	0.12	0.01	0.01	For 15 min, typ $\pm \Delta$ 2°C, after warm up, ORL < -25 dB
Stability over temp (dB)	0.6	0.6	0.6	0.6	NA	NA	0.8	0.35	0.35	Typical
λ initial tolerance (nm)	20	20	20	30	5	5	20	NA	5	At 25°C
λ width (nm)	3	3	3	3	3	3	< 1	NA	20	FWHM, typical
λ (nm/°C)	0.4	0.4	0.4	0.4	0.1	0.1	0.1	0.4	NA	Typical
Mode controlled source	NA	NA	NA	NA	NA	NA	Yes	Yes	NA	50/125 compliant: IEC 61280-4-1 {Ed.1.0}, TIA 526-14A & TIA TSB-178.
Reconnection repeatability (dB)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	NA	95% confidence
Modulation	270 Hz, 1 kHz, 2kHz ± 2%, 2 Hz blink for 660 nm LED									
Laser output power	Adjustable over 7 dB in 0.01 dB steps						NA	NA	NA	



General Specifications

Battery life	Laser/LED source: 40/35 hours in Autotest, 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			
Power	2 Alkaline AAA cells, selectable auto-off, low battery indicator			
Mult-fibre ID	Up to 12 fibres			
Standard accessories excludes (K9809A)	Blue or Green SC adapter, quick guide, soft carry pouch, wrist strap, 50 & 62.5um mandrel wrap set (multimode only).			
Standard accessories (K9809A only)				

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

Ordering Information

Description	Part number			
KI 9800A Series				
Instrument, Source 635 nm VFL Laser	KI 9807A			
Instrument, Source 650 nm VFL Laser	KI 9808A			
Instrument, Source 660 nm LED	KI 9809A			
Instrument, Source 850 / 1300 nm LED	KI 9812A			
Instrument, Source 1310 nm Laser	KI 9820A			
Instrument, Source 1310 / 1550 nm Laser	KI 9822A			
Instrument, Source 1310 / 1550 nm Laser APC	KI 9822A-APC			
Instrument, Source 1310 / 1625 nm Laser APC	KI 9825A-APC			
Instrument, Source 1310 / 1490 / 1550 nm Laser	KI 9827A			
Instrument, Source 1310 / 1490 / 1550 nm Laser APC	KI 9827A-APC			
Instrument, Source 1310 / 1550 / 1625 nm Laser APC	KI 9828A-APC			
Instrument, Source 850 nm VCSEL	KI 9840A			

Please enquire for non-listed specification.

Active | Passive | Test Equipment | Tooling | Cable | Fibre Management

For further information: www.fibreoptic.com.au +61 3 9757 3000

