

The KI 7800C series Optical Light Source is used with an Optical Power Meter to test loss on single mode and multimode optical fiber systems, at 2 to 4 wavelengths.

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

Optical Communications Test Applications

- Single mode & multimode loss testing
- Cabling contractors

Features

- Ideal for mixed MMF & SMF testing
- Up to 4 mixed LED or Laser sources
- Autotest compatibility with other instruments
- Excellent optical power stability
- Excellent re-connection repeatability
- Patented low cost interchangeable connectors for all common types
- Mode controlled multimode sources
- LED sources have mandrel wraps for 50 & 62.5 μm fiber
- Optical test tone source
- Long battery life
- Compact, rugged & light weight
- 3 ~ 7 Year warranty
- 3 year calibration cycle
- Sunlight readable display
- Made in Australia



The KI 7800C Optical Light Source is used with a power meter for measuring optical loss on single mode and multimode fiber cable. A test tone feature on Kingfisher sources and meters also provide a handy continuity test and fault finding function.

Alternatively the KI 7800 can be used to test continuity and find faults in combination with with a Kingfisher clip-on fiber identifier.

All emitters feature excellent repeatability and stability. Re-connection repeatability is < 0.1 dB, resulting in exceptional measurement accuracy.

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 5 working weeks eliminates the requirement for rechargeable batteries and time consuming re-charging procedures.

Interchangeable optical connectors are dust and drop

protected. Instruments come with 3 popular connector adaptor styles and all general accessories. Metal free adaptors help avoid contamination of connectors in high power systems.

When used with Autotest compatible Kingfisher power meters or Loss Test Sets, automatic λ identification is achieved.

Up to 4 assorted LED or laser sources can be specified per instrument, making this a versatile test source for mixed multimode / single mode fiber testing.

Single or dual λ LED sources meet the Encircled Flux (EF) standard compliance, and provide the most consistent and reliable testing results.

Please refer to other brochures for our convenient FiberTester kits, comprising groups of instruments and common accessories supplied in a protective field carry case.

SPECIFICATIONS

	1310/1550 nm Laser	Other Laser	850 / 1300 nm LED	Comments
Output Power (dBm) @ Fiber Type (μ m)	0 @ 9/125	1 ~ 2 λ : -4 @ 9/125 3 ~ 4 λ : -7 @ 9/125	-23 @ 62.5/125 -35 @ 9.5/125	\pm 1 dB for Laser \pm 3 dB for LED
Short term stability (dB)	0.04 ¹	0.06 ¹	0.01	For 15 min, typ \pm Δ 2°C, after warm up
Stability over temp (dB)	0.6	0.6	0.35	Typical, over temperature
λ initial tolerance (nm)	20	20		At 25 °C
λ width (nm)	3	< 1		FWHM, typical
λ nm/°C	0.4	0.1	0.4	Typical
Mode Controlled Source	NA	NA	Mode controlled ²	
Reconnection repeatability (dB)	0.1		0.05	95 % confidence
Modulation	270 Hz, 1 KHz, 2 KHz, \pm 2 %			
Laser output	Adjustable over 6 dB in 0.01 dB steps			

1) ORL < -25 dB.

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	190 hrs in Autotest
Size	190 x 130 x 70 mm, 7.5" x 5.1" x 2.8"
Weight	500 gm, 1.1 lb. Shipping 1.5 Kg, 3.3 lb
Temperature	-15 to 55°C (Operating) / -25 to 70°C (Storage)
Hidden keypad	For setting advanced functions
Case	Polycarbonate, 1 meter drop tested
PC interface	USB Type B
Power	2 alkaline C cells (7.6 A/Hr) External DC with 2.5mm +ve pin or via USB port. Selectable auto-off, low battery indicator, backlit display

ORDERING INFORMATION

Please enquire for non-standard:
Connectors, APC etc
Laser / LED wavelengths

Ordering Information	Ports	P/N
Instrument, Source 1310-1550 nm Laser	1	KI 7822C
Instrument, Source 850-1300 nm LED, 1310-1550 nm Laser	2	KI 7824C
Instrument, Source 1310-1490-1550 nm Laser	1	KI 7827C
Instrument, Source 1310-1550-1625 nm Laser	1	KI 78010C
Instrument, Source 1310-1490-1550-1625 nm Laser	1	KI 78016C

STANDARD ACCESSORIES

Description	Quantity
A set of metal-free interchangeable connector adaptors: SC (OPT046), FC (OPT051), ST (OPT040)	1 set per port
Operation manual	1
C cell batteries & AA-to-C size battery converter	2
Calibration certificates	1
Carry Pouch, Carry strap & Leather protective holster	1
50 & 62.5 µm fiber mandrel wraps for Multimode sources	1

OPTIONAL ACCESSORIES

Description	P/N
Option, Carry Case for 2 Instruments	OPT153
Option, Carry Case includes Cletop, Cleaning Sticks	OPT154A
Option, KI7000 Series Power Pack IEC 100-240V with 2.5 mm Plug	OPT103B

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 interchangeable optical connector adaptors. The ferrule type is fixed and customer specified as either PC or APC. Green is associated with APC. You can order any number of connector adaptors.

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

AUTHORIZED DEALER



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