

The KI 7400C series Ultra Stable Light Source is a premium instrument for field or laboratory testing of optical communication systems at 2 to 4 wavelengths from one port. It features zero warm up, superb productivity and ease of use, with an ergonomic and rugged design.

OPTICAL COMMUNICATIONS TEST APPLICATION

- Construction & commissioning
- Standards laboratories
- High throughput quality assurance

FEATURES

- Zero warm up & ultra stable
- High productivity testing of multiple wavelengths
- CWDM options
- Autotest compatibility with other instruments
- Patented low cost interchangeable connectors for all common types
- Long battery life
- Up to 4 laser sources from one port
- Compact, rugged & light weight
- 3 ~ 7 year warranty
- Sunlight readable display
- Made in Australia



The KI 7400 premium Optical Light Source is used with a power meter for measuring optical loss on singlemode and multimode fiber cable.

Ultra high laser stability is guaranteed, with zero warm up. Unlike most other sources, power output is unaffected by varying back reflection.

Up to 4 laser sources can be specified per instrument, with one output port.

Proven loss testing repeatability of the order of 0.01 dB can be readily achieved by using Kingfisher InGaAs power meter for loss testing. It is ideal for acceptance testing PC and APC optical connectors with an average loss of around 0.1 dB.

These sources can be used with Autotest compatible meters and Loss tester to automate loss testing functions, and provide automatic λ identification. A 4 λ source and meter in Autotest

mode automatically measures 4 λ attenuation in one direction providing associated equipment is calibrated at all relevant λ .

Options compliant with CWDM standards cover typical cable qualification for O, E, S, C, & L bands, including the water absorption peak.

All emitters are fiber connected for improved stability.

The test tone function can be used with a compatible optical power meter or clip on identifier for fiber detection, continuity testing and fault finding.

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 avoid contamination of connectors in high power systems.

SPECIFICATIONS

	1310/1550 laser	Other lasers	Comments
Fiber type	SMF 9/125 μm	SMF 9/125 μm	
2 λ source power, dBm	-4	-4	± 1 dB
3 or 4 λ power, dBm	-7	-7	
Stability, short term, dB	0.03 ¹	0.05 ¹	15 min, max, no warm up $\pm \Delta 3^\circ\text{C}$
Stability, long term, dB	0.03 ¹	0.05 ¹	24 hours, max, after warm up $\pm \Delta 3^\circ\text{C}$
Stability, long term, dB	0.2	0.2	Max, over temperature
λ initial tolerance, nm	20	6.5	At 25 $^\circ\text{C}$
λ width, nm	3	< 1	FWHM, typical
λ nm/ $^\circ\text{C}$	0.4	0.1	typical
Mode Controlled Source	N/A	N/A	
Reconnection repeatability, dB	0.1		95 % confidence
Modulation	270 Hz, 1, 2 KHz, ± 2 %		
Laser output	Adjustable over 6 dB in 0.01 dB steps		

1) ORL < -25 dB.

GENERAL SPECIFICATIONS

Battery life	190 hrs at 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 $^\circ\text{C}$ (Operating) / -25 to 70 $^\circ\text{C}$ (Storage)
Hidden keypad	For setting advanced functions
Case	Polycarbonate, 1 metre drop tested
PC interface	USB Type B

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

ORDERING INFORMATION

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

Description	Port	P/N
Instrument, Source 1310/1550 nm ultra stable laser	1	KI 7402C
Instrument, Source 1310/1490/1550 nm ultra stable laser	1	KI 7427C
Instrument, Source 1310/1490/1550/1625nm ultra stable laser	1	KI 74016C
Instrument, Source 1310/1550/1625nm ultra stable laser	1	KI 74010C

STANDARD ACCESSORIES

Description	Quantity
A set of metal-free interchangeable connector adaptors: SC (OPT046), FC (OPT051), ST (OPT040)	1
Operation manual	1
C cell batteries & AA-to-C size battery converter	2
Calibration certificates	1
Carry Pouch, Carry strap & Leather protective holster	1

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 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.

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

AUTHORIZED DEALER



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