The KI 7400 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 APPLICATIONS

- ✓ 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
- ✓ Interchangeable connectors including SFF styles
- ✓ Long battery life
- ✓ Up to 4 laser sources from one port
- ✓ Compact, rugged & light weight
- √ 3 ~ 7 year warranty





























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.

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 $\lambda.$

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 recharging 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 | 1300/1550 LED ² | Comments |
|-----------------------------------------------------------|---------------------------------------|--------------|----------------------------|-----------------------------------------|
| Fiber type | SMF 9/125 μm | SMF 9/125 μm | SMF 9/125 μm | |
| 2 λ source power, dBm 3 or 4 λ power, dBm | -4 -7 | -4 -7 | -20 | ± 1 dB |
| Stability, short term dB | 0.031 | 0.051 | 0.03 | 15 min, max no warm up $\pm \Delta$ 3°C |
| Stability, long term dB | 0.2 | 0.2 | 0.2 | Max, over temperature |
| $\boldsymbol{\lambda}$ initial tolerance, nm | 20 | 6.5 | 20 | At 25°C |
| λ width, nm | 3 | < 1 | 35/48 | FWHM, typical |
| λ nm/°C | 0.4 | 0.1 | | typical |
| 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 | | | |

Note 1: ORL < -25 dB. Note 2: 1300/1550 LED operating temperature is 0 to 55°C.

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 °C (Operating) / -25 to 70 °C (Storage) |
| Hidden keypad | For setting advanced functions |
| Case | Polycarbonate, 1 metre drop tested |
| Power | 2 alkaline C cells (7.6 A/Hr), 2 AA cells using AA-to-C battery converter or external 9 V DC with 2.5 mm +ve pin. Selectable auto-off, low battery indicator, backlit display |

OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

| Description | P/N | Description | P/N |
|------------------|---------|----------------|--------|
| D4 | OPT055 | LSA / DIN47256 | OPT071 |
| E2000/LSH, green | OPT060G | LC / F3000 | OPT072 |
| E2000/LSH | OPT060 | MU | OPT080 |

This instrument is supplied with metal-free optical interchangeable 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 Option, Carry Case incl Cletop, Cleaning Sticks & Microscope Option, K17x Series Power Pack IEC 100-240V 2.5 mm Plug | OPT153 OPT154 OPT103B |

AUTHORIZED DEALER

ORDERING INFORMATION

Please enquire for other combinations.

| Description | Port | P/N |
|-----------------------------------------------------------------------------|------|--------------------------|
| 1310/1550 nm ultra stable laser, PC 1310/1550 nm ultra stable laser, APC | 1 | KI 7402 KI 7402-APC |
| 1490/1625 nm laser, PC 1490/1625 nm laser, APC | 1 | KI 74014 KI 74014-APC |
| 1550/1625 nm laser, PC 1550/1625 nm laser, APC | 1 | KI 74013 KI 74013-APC |
| 1310/1390/1550/1625 nm laser, PC 1310/1390/1550/1625 nm laser, APC | 1 | KI 74015 KI 74015-APC |
| 1310/1490/1550 nm laser, PC 1310/1490/1550 nm laser, APC | 1 | KI 7427 KI 7427-APC |
| 1310/1490/1550/1625 nm laser, PC 1310/1490/1550/1625 nm laser, APC | 1 | KI 74016 KI 74016-APC |
| 1310/1550/1625 nm laser, PC 1310/1550/1625 nm laser, APC | 1 | KI 74010 KI 74010-APC |
| 1300/1550 nm LED, PC | 1 | KI 7419 |

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

STANDARD ACCESSORIES

| Description | Quantity |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Metal-free interchangeable connector adaptors: SC (OPT046) FC (OPT051) ST (OPT040) | 1 1 1 |
| Operation manual C cell batteries & AA-to-C battery size converter NATA (ILAC) traceable calibration certificates Carry Pouch, Carry strap & Leather protective holster | 1 2 1 1 |

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.



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