# KI7300A SERIES PREMIUM OPTICAL LOSS TEST SET

The KI 7300A series is a single directional loss test set which displays link loss in real time, at multiple wavelengths. Bi-directional testing is supported by PC software.

Featuring zero warm up, high speed and high accuracy, results can either be stored in internal memory, or inserted directly into a customized acceptance report on a PC, with one mouse click.

This is a reliable, robust and easy to use test instrument for single mode fiber optic cable and transmission systems.

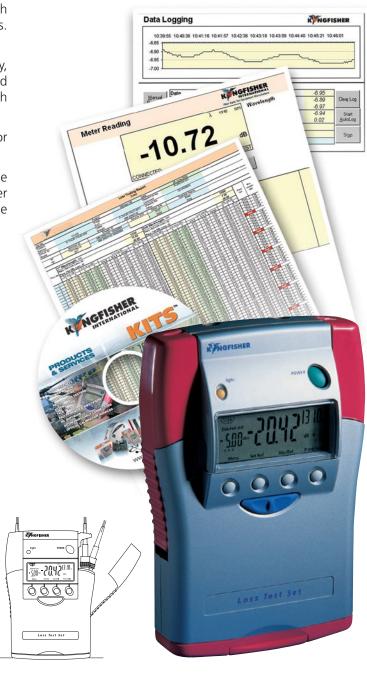
Light Source and Power meter options cover a wide range of connector types, all CWDM wavelengths, and power measurements from +27 to -70 dBm with 1% Traceable Accuracy.

# **OPTICAL COMMUNICATIONS TEST APPLICATIONS**

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

# **FEATURES**

- ✓ Zero warm up & high accuracy
- ✓ Autotest compatibility with other instruments
- ✓ Fully traceable CWDM test capability
- ✓ 3 year calibration cycle
- √ 3 ~ 7 year warranty
- ✓ Interchangeable connectors
- Long battery life
- ✓ Large memory
- Flexible real-time PC software
- Up to 4 laser sources
- ✓ Compact & light weight















3 ~ 7 YEAR WARRANTY





This is a fast and easy to use one way loss tester. From start of test to acceptance report takes 2 seconds and one mouse click.

Autotest is compatible with all other Autotest instruments, which simplifies training and operational issues.

The instrument provides instant accurate and traceable measurements, with zero warm up and a very high stability light

High availability is the result of zero warm up, 190 hour battery life,

patented interchangeable optical connectors, 3 year calibration cycle and superior reliability.

Interchangeable connectors include small form factor LC and MU styles, in addition to most other styles.

Flexible KITS™ PC software is a real-time measurement, Pass / Fail assessment and reporting solution. Easily customized for any language and reporting format, it also supports memory download, data logging, label printing, legacy instruments and enterprise level data management.

# **POWER METER SPECIFICATIONS**

Detector Type	Response λ nm	Damage level dBm	Calibration λ nm	Power Range dBm	Autotest sensitivity dBm	Mid range linearity <sup>1</sup> dB	Calibration Accuracy <sup>2</sup> %	Polarization Sensitivity dB	Total Uncertainty <sup>3</sup> dB
InGaAs	800 ~ 1700	+15	<i>820, 850,</i> 980, 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+5 to -60 +5 to -70	<i>-40</i> -50	0.02	1 % (0.06 dB)	< 0.005	0.3
H3B (InGaAs)	800 ~ 1700	+304	1300, 1310, 1550, 1270, 1290, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1570, 1590, 1610, 1625	+27 to -50	-30	0.02	1 % (0.06 dB)	< 0.005	0.35
H5 (InGaAs)	800 ~ 1700	+25	<i>820, 850,</i> 980, 1270, 1290, 1300, 1310, 1330, 1350, 1370, 1390, 1410, 1430, 1450, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610, 1625, 1650	+15 to -50 +15 to -60	<i>-30</i> -40	0.02	1 % (0.06 dB)	< 0.005	0.3
					typical	typical		typical	max

Note 1: Mid range linearity excludes top 3 dB & bottom 10 dB of range.

Note 2: Calibration condition: non coherent light, -35±5 dBm, 23±1°C,±1 nm, 10±3 nm FWHM, PC ceramic connector, 100μm fiber.

Note 3: Includes contributions due to: varying optical connector types, calibration uncertainty, full temperature, dynamic range and fiber type up to 200 μm core diameter.

Note 4: H3B can sustain the damage level for 2 minutes

#### LIGHT SOURCE SPECIFICATIONS

LIGHT SOURCE SI ECH ICATIONS					
	1310/ 1550 nm	Other lasers	Comments		
2 $\lambda$ source power 3 or 4 $\lambda$ power	-7 dBm -10 dBm	-7 dBm -10 dBm	± 1 dB		
Short term stability	0.03 dB	0.05 <sup>6</sup> dB	15 min, max, no warm up, Δ 3°C		
Stability, over temp	0.2 dB	0.2dB	Max, over temperature		
$\lambda$ initial tolerance	20 nm	6.5 nm	At 25 °C		
λ width	3 nm	< 1 nm	FWHM, typical		
λ nm/°C	0.4	0.1	typical		
Reconnection Repeatability	0.1	95 % confidence			
Modulation	270 Hz, 1, 2 KHz, ± 2 % Adjustable over 6 dB in 0.01 dB steps				
Laser output					

Note 6: For ORL < -25 dB.

# GENERAL SPECIFICATIONS

GENERAL SI ECII ICATIONS					
Battery life Size Weight Temperature	360 hrs Power Meter / 190 hrs laser in Autotest 190 x 130 x 70 mm, 7.5" x 5.1" x 2.8" 500 gm, 1.1 lb. Shipping 1.5 Kg, 3.3 lb -15 to 55 °C (Operating) / -25 to 70 °C (Storage)				
Hidden keypad Case RS232 Memory	For setting advanced functions Polycarbonate, 1 metre drop tested on concrete 3.5 mm jack connector, default baud 9.6 K 1900 dual $\lambda$ loss test results				
Power	2 alkaline C cells (7.6 A/Hr) or external 9 V DC with 2.5 mm +ve pin. Selectable auto-off, low battery indicator, backlit display				
Tone detection	150 - 9999 Hz ± 1 %				
Max / min	Recording feature for stability testing				

# INTERCHANGEABLE CONNECTOR OPTIONS

This instrument is supplied with metal-free optical interchangeable connector adaptors. The source ferrule type is fixed and customer specified as either PC or APC. The power meter is for both PC & APC. Blue is associated with PC. Green is associated with APC. You can order any number of connector adaptors. Order quantity two of each type.

# OPTIONAL INTERCHANGEABLE CONNECTOR ADAPTORS

Description	P/N	Description	P/N
E2000/LSH, green E2000/LSH LSA / DIN47256 LC / F3000	OPT060G OPT060 OPT071 OPT072	MU 2.5mm universal SMA 905/906	OPT080 OPT081 OPT082

### ORDERING INFORMATION

Please enquire for:

Other wavelength combinations

High power measurement

Large area power meter detector options

Description	P/N
1310/1550 nm laser PC, InGaAs Meter	KI 7303A-InGaAs
1310/1550 nm laser APC, InGaAs Meter	KI 7303A-InGaAs-APC
1310/1550 nm laser PC, H3B meter	KI 7303A-H3B
1310/1550 nm laser APC, H3B meter	KI 7303A-H3B-APC
1310/1550 nm laser PC, H5 meter	KI 7303A-H5
1310/1550 nm laser APC, H5 meter	KI 7303A-H5-APC
1490/1610 nm laser PC, InGaAs Meter	KI 73012A-InGaAs
1490/1610 nm laser APC, InGaAs Meter	KI 73012A-InGaAs-APC
1550/1610 nm laser PC, InGaAs Meter	KI 7306A-InGaAs
1550/1610 nm laser APC, InGaAs Meter	KI 7306A-InGaAs-APC
1310/1490/1550 nm laser PC, InGaAs Meter	KI7307A-InGaAs
1310/1490/1550 nm laser APC, InGaAs Meter	KI7307A-InGaAs-APC
1310/1550/1625 nm laser PC, H3B Meter	KI73010A-H3B
1310/1550/1625 nm laser APC, H3B Meter	KI73010A-H3B-APC
1310/1390/1550/1610 nm laser PC, InGaAs Meter	KI7308A-InGaAs
1310/1390/1550/1610 nm laser APC, InGaAs Meter	KI7308A-InGaAs-APC
1310/1490/1550/1610 nm laser PC, InGaAs Meter	KI7309A-InGaAs
1310/1490/1550/1610 nm laser APC, InGaAs Meter	KI7309A-InGaAs-APC

# STANDARD ACCESSORIES

Description	Quantity
SC connector adaptor OPT046 blue or OPT046G green FC connector adaptor OPT051 ST connector adaptor OPT040 KITSTM Testing software & RS232 Cable Operation manual	2 2 2 1 1
C cell batteries & AA-to-C size battery converter NATA (ILAC) traceable calibration certificate including: Power Meter, Light Source Carry Pouch, Carry strap & Leather protective holster	2 1 1

# **OPTIONAL ACCESSORIES**

Description	P/N
Carry case for 2 instruments	OPT153
Power pack, 90-240V IEC	OPT103B
USB-RS232 converter	OPT188

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

