

TECHNICAL DATA SHEET



LTSH Insertion Loss Test Set Return Loss Test Set

The KD Optics LTSH series loss sets are a combined source and power meter designed to make insertion loss (LIM) and return loss (RLM) testing in the field easy, reliable and most importantly, consistent. To this end the source wavelength and the power meter wavelength are locked together to take out any wavelength measurement error. Ultra fast stabilisation of the lasers means that errors are less likely to be made due to laser stabilisation times. The unit incorporates a real time clock and 1000 location memory, so when a result is recorded, the date and time is stamped along with the loss insertion measurement (LIM), the measurement wavelength and the absolute power as well as an identification number. This result may be printed out directly or downloaded to a PC. Additionally the unit features a unique facility enabling manual setting of the dBrel figure, eliminating the need in many cases for two units to be referenced back-to-back locally before a LIM can be made.

The LTSHXXXRL optionally incorporates return loss measurement (RLM) capability with the ability to switch very easily between dBrel and return loss.



Auto laser selection

Ultra fast laser stabilisation

Wide dynamic range

Internal real time clock

Output to a PC or printer

Hand Held, rugged and compact

Loss set Specifications

	LTSH8513	LTSH1315	LTSH1315RL
Wavelength	850 and 1310nm	1310 and 1550nm	1310 and 1550nm
Source type	LED	Dual Laser	Dual Laser
Spectral Characteristics	850 ±15nm 1300 ±15nm	1310 ±12nm 1550 ±12nm	1310 ±12nm 1550 ±12nm
Output Level	Typically -20dBm	Typically -6dBm	Typically -2dBm
Return Loss	N/A	N/A	Up to 70dB
Optical Connector	FC/PC, ST, SC etc.	FC/PC, ST, SC etc.	FC/APC (standard)
Spectral FWHM	Typ. 30nm (850nm), 50nm (1300nm)	Typ. 3nm	Typ. 3nm
Output Stability	±0.05dB or less over 1 hour at 23°C		
Stabilisation Time	Typically 30 seconds from power up at 23°C		
Measurement Range	+10 to -70dBm, normal range; +20dBm to -60dBm, CATV range ('H' option)		
Measurement Wavelength	1310nm and 1550nm standard, 12 other wavelengths may be programmed		
Measurement Accuracy	±5% at -23dBm		
Memory	1000 locations stores optical data and time/date		
Measurement Resolution	0.01dB		
Data output	RS232 to printer or PC		
Power requirements	4 x Internal rechargeable AA cells with external charger		
Temperature range	0 - 50°C		
Dimensions	250 x 227 x 78mm		

Loss Set Ordering information

LTSH8513 850nm / 1310nm Insertion Loss Set
 LTSH1315 1310nm / 1550nm Insertion Loss Set
 LTSH8513RL 850nm / 1310nm Insertion and Return Loss Set
 LTS1315HRL 1310nm / 1550nm Insertion and Return Loss Set

Loss Set Optional accessories

Spare AC charger
 Bare fibre adapters
 Test cables, patch cords etc.
 Additional connector adapter

Loss Set Standard accessories

Manual
 One connector adapter
 Protective boot
 One year warranty



LTSH1315 shown in protective boot

Other Products available from KD Optics:
 Single and Multimode Power meters
 Laser and LED sources
 Loss Test Sets
 Optical attenuators
 Optical Talk sets
 Cooled laser sources
 Optical data logging and Device alignment test sets
 Thermo Electric Cooler (TEC) controllers

Manufactured in the UK by:
 KD Optics Ltd
 New Forest Farm
 Walshford, Wetherby, N.Yorks LS22 5JJ UK
 Tel 01937 587003 Fax 01937 587002
 e-mail: kdsales@kdoptics.com www.kdoptics.com

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