

InfiniBeam Optical Test Kit









STRAN Technologies developed the InfiniBeam Optical Test Kit, which includes a kit for specific verification of MIL-DTL-83526 Expanded Beam Optical Connector Assemblies. The Device provides an easy way to verify the optical quality of the cable assemblies, both in the lab as well as in the field. To ease the operation and to minimise external components during the test procedure of expanded beam cable assemblies, the Test Set is provided as an 'all-in-one' instrument, thus providing an in-built Light-Source as well as a Power Meter in the same enclosure. Long Battery Life makes this instrument ideal for mobile use. There is an RFID Reader/Writer incorporated with this instrument. This is to identify, verify and manage RFID Enabled Cable Assemblies, with integrity. The Multi Mode version of this instrument launches at both 850/1310nm whereas the Singlemode version operates at 1310/1550nm.

Optical Loss can be measured as an absolute as well as a relative value. The Relative Value read will be zeroed against the supplied and known HQ Reference Cable. A PC application is available to collect all readings from this instrument for electronic record keeping. The test kit is typically supplied in a rugged carry case with all components required to carry out test procedures. The range of STRAN products contains hand held, laboratory and production test equipment.

- All Mil-DTL-83526 Interfaces
- In-built light-source
- Multiple Detectors
- Fast laser stabilisation time
- Automated test with RFID
- Long Battery Life
- USB Power & data Comms
- Auto Power-off feature
- Measures Loss in ABS & REL
- Test Expanded Beam Cable





Expanded Beam Optical Test Kit







Multimode Loss set specifications	
Wavelength	850 ±15nm, 1300 ±15nm
Source type	LED
Output Level	Typically –20dm
Optical Connector	InfiniBeam 4ch, compatible to Mil-DTL-83526, other types on request
Spectral FWHM	Typ. 30nm (850nm), 50nm (1300nm)
Output Stability	±0.05dB or less over 1 hour at 23°C
Measurement Wavelength	850nm and 1310nm

Singlemode Loss set specifications	
Wavelength	1310 ±12nm, 1550 ±12nm
Source type	Laser
Output Level	Typically –6dm
Optical Connector	InfiniBeam 4ch, High Return Loss (HxMA compatible) or low return loss (ProBeam junior compatible) version available, other types on request
Spectral FWHM	Typ. 3nm
Output Stability	±0.05dB or less over 1 hour at 23°C
Measurement Wavelength	1310nm and 1550nm

General specifications	
Stabilization Time	Typically 30 seconds from power up at 23°C
Measurement Range	+5dBm to -50dBm
Measurement Accuracy	±5% at –23dBm
Memory	500 location, stores serial number, station ID, UID, optical data time/date
Measurement Resolution	0.01dB
Data output	USB to PC via USB converter lead
Batteries	4 x AA Internal rechargeable NiMH cells
Power requirements	Charged with USB lead with PC or USB charger
Temperature range	0 – 50°C
Kit contents	Test set, Expanded Beam gold reference, USB PC interface cable, AC charger, Wet & dry wipes, ABS case
Dimensions	250 x 140 x 55 mm, case