

Master Test Lead

The Optronics range of Master Test Leads is ideal for high precision and high performance optical test applications. The test leads are terminated with the highest quality physical contact (singlemode) A Grade zirconia ferrule connectors. The connectors are manufactured with precision mounting and polishing techniques which ensure excellent mating characteristics and optimised optical performance.

Features

- > Optimised geometry of fibre, cable and connector providing reduced installation time and cost through improved accuracy and reliability of measurement
- > Conforms to IEC, EIA-TIA, and Telecordia performance requirements
- > Supplied with ultra tight geometry ITU-T G.652D (LWP) singlemode and multimode optical fibres
- > Available with FC, SC, LC, & ST high performance connector types to suit majority of applications
- > Available in standard lengths
- > RoHS, REACH & SvHC compliant
- > Optional foam lined storage case for added protection
- > Tethered dust caps for protection of the connector end face
- > End face geometry, concentricity and IL / RL test report provided

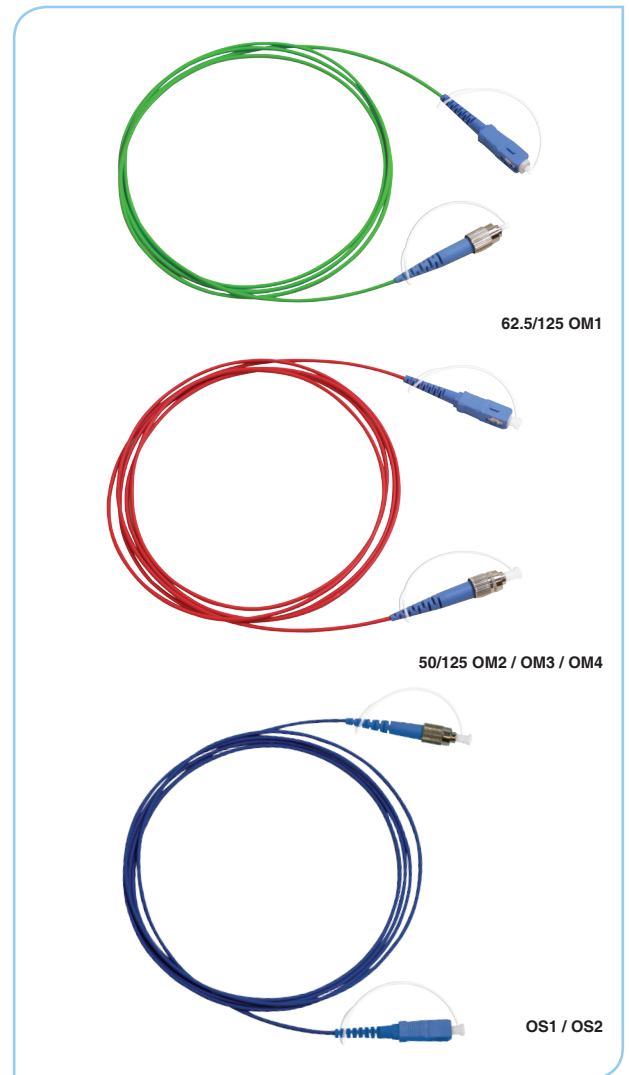
Application

- > Optical network testing
- > Testing Labs
- > Critical telecomms and data centre applications
- > Instrumentation
- > Termination houses

Connector Specification

OPTICAL PERFORMANCE	SINGLEMODE**	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.10 dB	IEC 61300-3-4
MAX IL/Random	0.20 dB	0.25 dB	IEC 61300-3-34
Ave/Master*	0.08 dB	0.08 dB	IEC 61300-3-4
Ave/Random*	0.08 dB	0.10 dB	IEC 61300-3-34
Return Loss	55/65 dB	-	IEC 61300-3-6
Concentricity / Eccentricity Max fibre to ferrule OD finished product	0.8µm Max / 0.4 µm Max	1.5 µm Max / 0.75 µm Max	
Apex Offset	50 µm Max	50 µm Max	
Radius of curvature (ST, SC, FC)	10mm Min / 20mm Max		
Radius of curvature (LC)	5mm Min / 12mm Max		
Mechanical endurance	500 matings		IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude		IEC 61300-2-1
Drop	Drop height 1m, 5 drops		IEC 61300-2-12
Cable retention	2mm = 70N		IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg		IEC 61300-2-5

* The change in attenuation for all the above listed criteria shall be a maximum of 0.10dB
 **APC available on request



Cable Specification

CHARACTERISTICS	UNITS	SIMPLEX
Cable Material		LSZH
Strength Member		Aramid
Crush	N	1000
Operating Temperature	°C	-20 to 60
Secondary Buffer Diameter	µm	900±50
Colour	µm	OS1/2 ITU-T G.652D SM – Blue OM1 62.5/125 – Green OM2, OM3, OM4 50/125 – Red

Fibre Specification

SINGLEMODE CHARACTERISTICS	UNITS	SINGLEMODE
Cladding Diameter	µm	125±0.4
Core/Cladding Concentricity Error	µm	≤0.3
Cladding Non Circularity	%	≤0.3
Mode Field Diameter (mfd) @ 1310nm	µm	9.0±0.4
Mode Field Diameter (mfd) @ 1550nm	µm	10.1±0.5



Hard Carry Case

MULTIMODE CHARACTERISTICS	UNITS	MULTIMODE OM1	MULTIMODE OM2, OM3, OM4
Cladding Diameter	µm	125±1	125±1
Core Diameter	µm	62.5±1	50±1
Core/Cladding Concentricity Error	µm	< 1.0	< 1.0
Cladding Non Circularity	%	< 1.0	< 1.0
Numerical Aperture		0.275±0.015	0.2±0.015

Part Number Generator

