Datasheet

LC-QR Uniboot

- The LC-QR (QR=QuickRelease) Uniboot is designed for high density applications. The Connector can be released by pulling the housing or the boot.
- IEC 61754-20 compatible (Adapter, Transceiver)
- Our Connectors are the key components for a low loss, broad-band data transmission in fiber optic networks.
- The constantly growing demand for higher data transmission capacities places exceptionally stringent qualitative criteria on present and future telecommunication networks. Interconnectivity components are the key for powerful fiber optic networks.
- Mechanical, optical and geometrical precision are the quality features necessary to reduce transmission losses to an absolute minimum at fiber transition. Our SM connectors are tunable in 60° steps. Independent of the Grade all assemblies are 100% tested. Constant Quality Control ensures best performance.
- R&MinteliPhy can be retrofitted.

Technical data sheet connector

PERFORMANCE ACCORDING DEFINITION R&M

DEFINITION IL / RL @ R&M	GRADE A*/1	GRADE A*/2	GRADE B/1	GRADE B/2
Insertion loss (IL) 97%	≤ 0.15dB	≤ 0.15dB	≤ 0.25dB	≤ 0.25dB
Insertion loss (IL) typical value	≤ 0.07dB	≤ 0.07dB	≤ 0.12dB	≤ 0.12dB
Return loss (RL) 500x mating's	≥ 80dB	≥ 50dB	≥ 65dB	≥ 45dB
Typical value UPC=first 10 mating's	≥ 90dB	≥ 55dB (UPC)	≥ 85dB	≥ 55dB (UPC)
Laser power, mated IEC 61300-2-14, 500h, 23°C	≤ 2W	≤ 300mW	≤ 1W	≤ 300mW

DEFINITION IL / RL @ R&M	GRADE C/1	GRADE C/2	GRADE AM/2	GRADE BM/3
Insertion loss (IL) 97%	≤ 0.50dB	≤ 0.50dB	≤ 0.25dB (100%) ≤ 0.15dB (95%)	≤ 0.50dB (100%) ≤ 0.25dB (95%)
Insertion loss (IL) typical value	≤ 0.25dB	≤ 0.25dB	≤ 0.10dB	≤ 0.15dB
Return loss (RL) 500x mating's	≥ 60dB	≥ 45dB	≥ 45dB	≥ 35dB
Typical value UPC=first 10 mating's	≥ 80dB	≥ 55dB (UPC)		
Laser power, mated IEC 61300-2-14, 500h, 23°C	≤ 500mW	≤ 300mW		

Grade 1: 55dB unmated in all combinations
Grade-A* and Grade Am/Bm are not fully released by IEC 61753-1.

Reichle & De-Massari AG
CHE-8620 Wetzikon
10.2022 – 1.0/Dei

MECHANICAL PROPERTIES

CRITERIA	DATE / VALUE		STANDARD
Mating durability	500x minimum		IEC 61300-2-2
Cable retention	50N, 120s 100N, 120s	Cable diameter ≤ 2.0mm Cable diameter > 2.0mm	IEC 61300-2-4
Vibration	10-55Hz, 1 oktave / min. 3 axis of 15 cycles, 0.5h / axis amplitude 0.75 mm		IEC 61300-2-1
Repeated bending	200 cycles -90° / 0° / +90° / 0° Load = 5N		IEC 60794-1-E6
Torsion	15N; 25 cycles ± 180°		IEC 61300-2-5
Drop	1.5 m, 5 times		IEC 61300-2-12
Static side load	1N, 1h		IEC 61300-2-42

CLIMATIC CLASS

CRITERIA	DATE / VALUE	STANDARD
Cold	-10°C, 96h	IEC 61300-2-17
Dry heat	+70°C, 96h	IEC 61300-2-18
Change of temperature	-10°C to +60°C, 6 cycles (< Delta 0.2dB) -25°C to +70°C, 12 cycles (reversible)	IEC 61300-2-22

LONG TERM ENDURANCE

CRITERIA	DATE / VALUE	STANDARD
Heat resistance	+70°C, 1000h	IEC 61300-2-18
Damp heat	+40°C at 93%, 96h	IEC 61300-2-19

LC-QR Uniboot

DIMENSIONS CONNECTOR LC -QR UNIBOOT