



## RL — RADIO LINK OUTDOOR LCHD-UNIBOOT COMPACT CABLE ASSEMBLY

FIBER OPTIC CABLE ASSEMBLY LCHD-UNIBOOT/ LCHD-UNIBOOT, MM 50/125 OM3

RL series FO Cable Assemblies are intended to connect remote radio modules to main backhaul units. Low-loss optical connectors provide a reliable in-line optical connection. The assembly is made on the basis of a compact cable with a sheath of thermoplastic polyurethane compound, providing reliable protection from precipitation, long-term exposure to UV radiation, as well as the performance of the optical assembly in a wide temperature range. The compact design of the LCHD-Uniboot optical connector ensures assembly compatibility with different types and sizes of cable entries starting from M20, as well as easier removal of the connector from the adapter or SFP module.

### BENEFITS

#### Connectors

- ▶ Precision ferrule with small eccentricity ensure low insertion loss
- ▶ The LCHD-Uniboot connector housing can be used with different cable entries and sizes configurations
- ▶ Easy to remove the LCHD-Uniboot connector

#### Optical cable

- ▶ Compact cable with high mechanical characteristics has a wide range of operating temperatures
- ▶ Corning multimode fiber OM3

#### Standards

Meets or exceeds requirements ISO/IEC 11801, TIA/EIA-568-C. 3, IEC 61754-20, TIA 604-10-a, complies with RoHS Directive



## SPECIFICATION

APPLICATIONS			
1	Purpose of the product	Infrastructure of the radio subsystem of cellular networks	
2	Product type	Industrial cable systems	
3	Fiber type	MM 50/125 OM3	
DESIGN			
1	Number of fibers	2	
2	General Construction	Round section, reinforced by aramid strength yarns, outer jacket made of thermoplastic compound, UV stabilized	
3	Outer diameter	4,8 mm	
4	Connector (Side A)	LCHD-Uniboot, MM Low – Loss , color – heather violet, white	RAL 4003 RAL 9003
5	Connector (Side B)	LCHD-Uniboot, MM Low – Loss , color – heather violet, white	RAL 4003 RAL 9003
6	Cable outer jacket color	black	RAL 9005
7	Polarity	A/B – B/A	
MECHANICAL PERFORMANCE			
1	Tensile Strength <sup>1)</sup>	800 N	(installation)
2	Bend Radius	> 48 mm	(installation)
3	Crush Resistance	200 N/cm	(long term)
		400 N/cm	(short term)
OPTICAL PERFORMANCE			
1	Cable attenuation (max.) <sup>2)</sup>	≤ 2,8 dB/km	@ 850 nm
		≤ 0,9 dBkm	@ 1300 nm
2	Insertion loss in connection (IL) <sup>3)</sup>	≤ 0,20 dB	@ 850 nm
3	Return loss (RL) <sup>4)</sup> UPC/APC	≥ 35 dB	@ 850 nm
TEMPERATURE PERFORMANCE			
1	Temperature range	from – 15°C to + 50°C from – 40°C to + 70°C from – 40°C to + 70°C	(installation) (operation) (storage)

1) This value characterizes the allowable force on the separator.

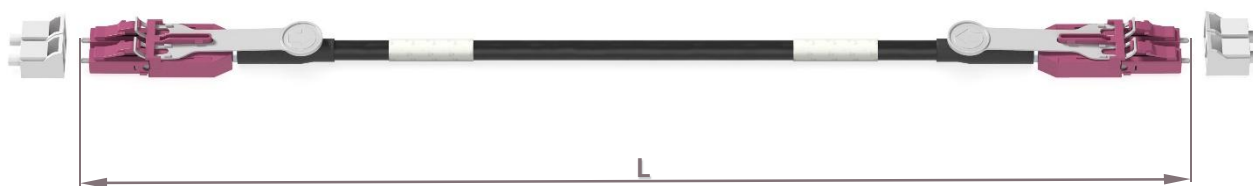
2) The attenuation coefficient of the optical fiber after cable production

3) According to IEC 61300-3-4, Method B.

4) According to IEC 61300-3-6.

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**PART NUMBERS**

<b>ULTRA LOW LOSS, UPC</b>	
81113101	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 25 m
81113102	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 30 m
81113103	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 50 m
81113104	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 70 m
81113105	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 100 m
81113106	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 150 m
81113107	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 200 m
81113108	RL - FO Cable Assembly 2 x 50/125 OM3, LCHD Uniboot/LCHD Uniboot, type S, FRPU, ULL, 2 m

Note: other configurations can be made upon request.

**LENGTH OF OPTICAL CONNECTION CORD**

<b>THE MAX. LENGTH OF THE CORD</b>			
Outer diameter of cable	4,8 mm		
Max. length <sup>1)</sup>	≤ 200 m		
<b>LENGTH TOLERANCE</b>			
Optical cord length	≤ 30 m	30 – 100 m	> 100 m
Tolerance on length	0 / + 250 cm	+ 1%	+ 2%

1) The max. length value refers to standard items. Longer lengths can be made upon request.

## MULTIMODE DESIGN

ULTRA LOW LOSS					
1	Insertion loss in connection (IL) <sup>1)</sup>	≤ 0,20	dB		@ 850 nm
2	Return loss (RL) <sup>2)</sup>	≥ 35	dB	polish UPC	@ 850 nm

1) According to IEC 61300-3-4, Method B (the max. value for measurement against reference).

2) According to IEC 61300-3-6 (the min. value of the Return Loss).

## POLARITY

Polarity A/B – B/A «direct»



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