



All dimensions are in mm; tolerances: ± 3mm for A ≤ 300 mm; ± 1% for A > 300 mm

Available variants

Type	Insertion loss at max. Frequency	Weight (g) / pce
LU7-138-XXX	≤ 0.00164 dB/mm * A mm + 0.35 dB	0.2456 g/mm * A mm + 181 g

XXX – length in mm = A

- Standard lengths are 600, 800 and 1000mm. The smallest possible length is 400mm. -

Note: max. Insertion Loss:

First constant = Cable attenuation in dB /mm; Second Constant = Connector left and Connector right +auxiliary Adaptor

Weight:

First constant = Cable- and Armour- weight per mm; Second Constant = Connector left and Connector right weight per pce

Assembly parts

Connector left	RPC-N 50 Ω plug	05S123-2U7S3
Connector right	RPC-N 50 Ω jack	05K123-2U7S3
Cable	RTK 162	
Armour	Metal tubing with fixed bending rate and protection braid	

Electrical data

Impedance	50 Ω
Frequency	DC to 18 GHz
Return loss ¹	≥ 28 dB, DC to 4 GHz ≥ 20 dB, 4 GHz to 18 GHz
Insertion loss ¹	see table “Available variants”
RF-leakage	≥ 100 dB up to 1 GHz

¹ Return Loss and Insertion Loss includes the measurement adaptor

Stability data

Insertion loss stability:

After 90° bending ≤ 0.03 dB, DC to 4 GHz
 ≤ 0.05 dB, 4 GHz to 18 GHz

$\leq 0.5^\circ$, DC to 4 GHz
 $\leq 2.0^\circ$, 4 GHz to 18 GHz

Straight after 3x90° bending $\leq 0.5^\circ$, DC to 4 GHz
 $\leq 1.5^\circ$, 4 GHz to 18 GHz

Return loss stability:

After 90° bending ≥ 48 dB, DC to 4 GHz
 ≥ 40 dB, 4 GHz to 18 GHz

Individual testing and documentation:

Stability data is tested according to the specification. Measurement plot with all 4 S-Parameters (S11; S22; S21; S12) and the care and handling instruction are included with the cable assembly. Auxiliary adaptors used are mentioned in the commentary field.

Mechanical data

Minimum bend radius: 60 mm

Environmental data

Operating temperature range² +20 °C to +26 °C
 Rated temperature range of use³ 0 °C to +50 °C
 Storage temperature range -40 °C to +85 °C
 RoHS compliant

² Temperature range over which these specification are valid.

³ This range is underneath and above the operating temperature range, within the cable assembly is fully functional and could be used without damage.

Recommended accessories

Wooden case with foam inlay⁴ VA_CASE-001

⁴ Supports two assemblies, for length 600 mm available only.



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