

# S-Link<sup>®</sup> Jumper Cables

## Outline

S-Link<sup>®</sup> jumpers are commonly used for the connection of the RF cable lines with the antenna or with the radios.

S-Link<sup>®</sup> jumpers are ideal for daily use even under difficult conditions and featured by the following characteristics:

- Long trouble-free field life as a result of tried and tested materials and production technologies
- Designed for outdoor applications under extreme climatic conditions(longitudinal waterproofing)
- High flexibility and small bending diameters
- Specially developed connectors using soldering technology, that guarantees superior electrical characteristics:
  - Screening attenuation >120dB
  - Low intermodulation product IM3 >160dBc
- Excellent return loss due to silver-plated connectors and attenuation-optimized cable materials
- Integrated lightning protection technology saves setup time, that is site-optimized and reduces system attenuation
- Hot-polyamide moulding between connector and cable jacket
- Waterproof to safety class IP68
- Used cable jacket of flame retardant, halogen-free material(FRNC)



## Technical Specification

Electrical Characteristic		1/4" S	3/8" S	1/2" S	1/2" R
Frequency range		DC to 2200MHz			
Peak power rating		6.4KW	11.9KW	16KW	40KW
Nominal impedance		50 Ω			
Return loss	30 - 1000MHz	>28dB			
	1000 - 2200MHz	>26dB			
Insertion loss	900MHz	≤0.18dB/m(cable) + 0.10dB(2connectors)	≤0.13dB/m(cable) + 0.10dB(2connectors)	≤0.10dB/m(cable) + 0.10dB(2connectors)	≤0.07dB/m(cable) + 0.10dB(2connectors)
	1800MHz	≤0.26dB/m(cable) + 0.10dB(2connectors)	≤0.20dB/m(cable) + 0.10dB(2connectors)	≤0.16dB/m(cable) + 0.10dB(2connectors)	≤0.10dB/m(cable) + 0.10dB(2connectors)
	2200MHz	≤0.30dB/m(cable) + 0.10dB(2connectors)	≤0.22dB/m(cable) + 0.10dB(2connectors)	≤0.17dB/m(cable) + 0.10dB(2connectors)	≤0.11dB/m(cable) + 0.10dB(2connectors)
Relative velocity of propagation		82% bis 84%			
Intermodulation at 900MHz +1800MHz +2200MHz		> 160dBc(3rd order product with 2 x 43dBm)			

Mechanical Characteristic				
Bending diameter repeated bending	> 25 mm	> 25 mm	> 35 mm	> 125 mm
Bending diameter single bending	> 13 mm	> 13 mm	> 25 mm	> 50 mm
Tensile strength	max. 600N	max. 600N	max. 750N	max. 1150N

Environment	
Waterproof to safety class(IEC 529)	IP 68
Max operating temperature range	-40°C to + 80°C
Installation temperature range	-15°C to + 60°C
Mechanical Vibration	MIL STD 202 Meth. 204/B
Shock resistance	MIL STD 202 Meth. 213/B
Corrosion resistance	MIL STD 202 Meth. 101

Material					
Cable	Inner conductor	copper clad aluminum wire	copper clad aluminum wire	copper clad aluminum wire	copper clad aluminum wire
	Dielectric	highly foamed polyethylene			
	Outer conductor	spiral corrugated copper tube	spiral corrugated copper tube	spiral corrugated copper tube	annular corrugated copper tube
	Jacket options	FRNC, black and PE black			
Connector	Inner conductor	brass/CuBe, silver-plated			
	Outer conductor	brass, silver-plated/Optargen			
Insulator	PP/PE/PTFE				
Sealing	hot-polyamide moulding				

\*Provide special jumper cable according to customer's requirement