# F4S-NMNM-3M-P-SGW



RSJ4-50 SureFlex® Jumper with interface types N Male and N Male with HELIAX® SureGuard weatherproofing, 3m

• If there are threads along the entire device port length, the HELIAX® SureGuard weatherproofing solutions will only seal properly if the HSG-M29-ADPT adapter is installed on the device port

### **Product Classification**

Product Type SureFlex® Premium, static PIM

Product Brand HELIAX® | SureFlex®

Product Series RSJ4-50

### General Specifications

Body Style, Connector A Straight
Body Style, Connector B Straight
Interface, Connector A N Male
Interface, Connector B N Male

Specification Sheet Revision Level A

#### **Dimensions**

**Length** 3 m | 9.843 ft

Nominal Size 1/2 in

## **Electrical Specifications**

**3rd Order IMD Static** -112 dBm

**3rd Order IMD Static Test Method** Two +43 dBm carriers

DTF, Connector A -34 dB

DTF, Connector B -34 dB

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)

**698–960 MHz** 1.065 30.04 **1700–2200 MHz** 1.065 30.04

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**2200–2700 MHz** 1.106

25.96

## Jumper Assembly Sample Label



### **Environmental Specifications**

**Immersion Test Method**Meets IEC 60529:2001, IP68 in mated condition

Weatherproofing Method HELIAX® SureGuard weatherproofing boot

Packaging and Weights

**Included** Weatherproofing boot

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant





# F4S-NMNM-3M-P-SGW

## Included Products

RSJ4-50

RSJ4-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket





RSJ4-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket

### **Product Classification**

Product Type Coaxial wireless cable

Product Brand HELIAX® | SureFlex®

**Product Series** RSJ4-50

Ordering Note CommScope® standard product (Global)

General Specifications

**Flexibility** Superflexible

Jacket Color Black

**Performance Note**Attenuation values typical, guaranteed within 5%

**Dimensions** 

 Diameter Over Dielectric
 9.423 mm | 0.371 in

 Diameter Over Jacket
 13.411 mm | 0.528 in

 Inner Conductor OD
 3.594 mm | 0.141 in

 Outer Conductor OD
 11.989 mm | 0.472 in

Nominal Size 1/2 in

**Electrical Specifications** 

Cable Impedance50 ohm ±1 ohm

**Capacitance** 83.9 pF/m | 25.573 pF/ft

dc Resistance, Inner Conductor2.65 ohms/km0.808 ohms/kftdc Resistance, Outer Conductor4.56 ohms/km1.39 ohms/kft

dc Test Voltage 2500 V

**Inductance** 0.213  $\mu$ H/m | 0.065  $\mu$ H/ft

**COMMSCOPE®** 

**Insulation Resistance** 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 10200 MHz

Peak Power15.6 kWVelocity79 %

### VSWR/Return Loss

VSWR	Return Loss (dB)
1.201	20.79
1.201	20.79
1.201	20.79
1.201	20.79
	1.201 1.201 1.201

### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.327	0.1	15.6
1.5	0.401	0.122	15.6
2.0	0.463	0.141	15.6
10.0	1.044	0.318	10.14
20.0	1.485	0.453	7.12
30.0	1.828	0.557	5.79
50.0	2.377	0.724	4.45
85.0	3.13	0.954	3.38
88.0	3.187	0.971	3.32
100.0	3.406	1.038	3.11
108.0	3.546	1.081	2.98
150.0	4.214	1.285	2.51
174.0	4.558	1.389	2.32
200.0	4.908	1.496	2.16
204.0	4.96	1.512	2.13
300.0	6.095	1.858	1.74
400.0	7.121	2.17	1.49
450.0	7.592	2.314	1.39
460.0	7.684	2.342	1.38
500.0	8.042	2.451	1.32

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512.0	8.148	2.483	1.3
600.0	8.891	2.71	1.19
700.0	9.683	2.951	1.09
800.0	10.431	3.179	1.01
824.0	10.605	3.232	1
894.0	11.101	3.383	0.95
960.0	11.555	3.522	0.92
1000.0	11.824	3.604	0.89
1218.0	13.226	4.031	0.8
1250.0	13.423	4.091	0.79
1500.0	14.906	4.543	0.71
1700.0	16.027	4.885	0.66
1794.0	16.537	5.04	0.64
1800.0	16.57	5.05	0.64
2000.0	17.624	5.371	0.6
2100.0	18.137	5.528	0.58
2200.0	18.641	5.682	0.57
2300.0	19.138	5.833	0.55
2500.0	20.11	6.129	0.53
2700.0	21.056	6.418	0.5
3000.0	22.432	6.837	0.47
3400.0	24.198	7.375	0.44
3600.0	25.055	7.636	0.42
3700.0	25.478	7.765	0.42
3800.0	25.898	7.893	0.41
3900.0	26.314	8.02	0.4
4000.0	26.727	8.146	0.4
4100.0	27.136	8.271	0.39
4200.0	27.542	8.394	0.38
4300.0	27.946	8.517	0.38
4400.0	28.346	8.639	0.37
4500.0	28.744	8.761	0.37
4600.0	29.139	8.881	0.36
4700.0	29.531	9.001	0.36
4800.0	29.921	9.119	0.35

4900.0	30.308	9.238	0.35
5000.0	30.693	9.355	0.34
6000.0	34.427	10.493	0.31
8000.0	41.403	12.619	0.26
8800.0	44.054	13.427	0.24
10000.0	47.914	14.603	0.22

## Material Specifications

**Dielectric Material** Foam PE

Jacket Material PE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends31.75 mm1.25 inMinimum Bend Radius, single Bend31.75 mm1.25 in

Number of Bends, minimum15Number of Bends, typical20

 Tensile Strength
 79 kg | 174.165 lb

 Bending Moment
 3.1 N-m | 27.437 in lb

 Flat Plate Crush Strength
 2 kg/mm | 111.995 lb/in

## **Environmental Specifications**

Installation temperature  $-40 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-55 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-67 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Storage Temperature  $-70 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-94 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

Attenuation, Ambient Temperature $68 \,^{\circ}\text{F}$  |  $20 \,^{\circ}\text{C}$ Average Power, Ambient Temperature $104 \,^{\circ}\text{F}$  |  $40 \,^{\circ}\text{C}$ Average Power, Inner Conductor Temperature $212 \,^{\circ}\text{F}$  |  $100 \,^{\circ}\text{C}$ 

EN50575 CPR Cable EuroClass Fire Performance Fca

Packaging and Weights

**Cable weight** 0.15 kg/m | 0.101 lb/ft



# Regulatory Compliance/Certifications

### Agency

#### Classification

CENELEC

EN 50575 compliant, Declaration of Performance (DoP) available

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

