



## Broadcaster's ordering guide

# Introduction

## For a better coaxial solution, start at the top

CommScope's HELIAX® portfolio is CommScope's top solution for all kinds of outdoor RF cabling needs. HELIAX solutions are built on a solid platform of superior materials, innovative design and an industry-leading warranty, making them a top choice for networks all over the world. Available in many designs for many different purposes, all HELIAX solutions share several key characteristics:

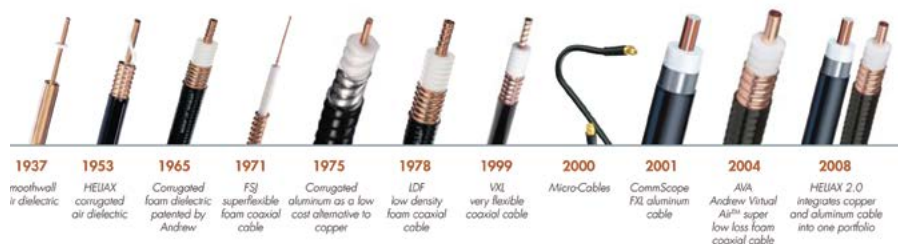
- Low attenuation compared to alternatives
- Weatherproof and pressure tight design
- Highly-efficient copper conductors
- Durable construction for longer service life
- The capability to handle higher power levels demanded by modern equipment
- High-quantity, short-lead ordering available

A unified, universal solution designed to simplify your deployments

As this guide demonstrates, CommScope produces a vast ecosystem of HELIAX cabling, connector, tool and accessory solutions that offer maximum compatibility, reliable quality and greatest possible value from end to end.

Your HELIAX deployments are backed by CommScope's extensive design expertise and industry-leading quality control and a 10-year warranty so you maximize your return on every dollar invested. And because HELIAX cable solutions are made in the USA, you can count on short lead times that support even the most demanding schedule.

It should come as no surprise that HELIAX is known the world over—CommScope has been building exceptional HELIAX solutions for more than 60 years.



## HELIAX: a legacy of innovation and progress

As a flagship brand of our RF network solutions portfolio, CommScope's HELIAX solutions have produced game-changing and game-winning innovations since their introduction in 1953. Back then, HELIAX was produced as the first air dielectric coaxial cable solution in the United States when there were barely 28 million television sets in operation.

Since then, the HELIAX has come to be known as the innovative leader in RF cabling innovation. Over the years, that has taken the shape of more efficient dielectrics, more rugged coverings, more flexible sleeves and more cost-effective materials. Every step along the way, HELIAX has found ways to offer more value and performance—while simplifying installation and lowering costs.



## CommScope helps broadcasters transition from 600 MHz to their new spectrum assignment

The FCC release and auction of licensed 600 MHz bands for use in wireless communications means that broadcasters must prepare for upcoming spectrum allocation and infrastructure upgrades. CommScope's HELIAX portfolio of cabling solutions is perfect complement of the overall broadcast ecosystem, where it has been helping broadcasters gain the greatest possible advantage in all kinds of spectrum for more than 60 years.

## The smart choice for all broadcast frequencies

Transitioning to new allocated frequencies is a business-critical priority for broadcasters. To optimize performance and reduce costs, the HELIAX portfolio remains the smartest and most complete option available. With CommScope and HELIAX in your corner, you stand to achieve great things in your new band assignments. Thank you for choosing CommScope and more than six decades of innovative leadership from HELIAX.

*Together, we're going to make history.*

# Air cables

	H5-50	HJ5-50	HJ5RPV-50	HJ7-50A	HJ7RPV-50	HJ8-50B	HJ9-50	HJ9HP-50	HJ11-50
<b>Construction materials</b>									
Jacket Material	Unjacketed	PE	PVC, Fire Retardant	PE	PVC, Fire Retardant	PE	PE	PE	PE
Dielectric Material	PE	PE	PE	PE	PE	PP	PE	PTFE	PP
Flexibility	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Inner Conductor Material	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube
Jacket Color	N/A	Black	Off-white	Black	Off-white	Black	Black	Black	Black
Outer Conductor Material	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper	Corrugated copper
<b>Dimensions</b>									
Nominal Size	7/8 in	7/8 in	7/8 in	1-5/8 in	1-5/8 in	3 in	5 in	5 in	4 in
Cable Volume	3.5 ft <sup>3</sup> /kft 325.2 L/km	3.5 ft <sup>3</sup> /kft 325.2 L/km	3.5 ft <sup>3</sup> /kft 325.2 L/km	14.0 ft <sup>3</sup> /kft 1300.6 L/km	14.0 ft <sup>3</sup> /kft 1300.6 L/km	36.7 ft <sup>3</sup> /kft 3409.4 L/km	117.0 ft <sup>3</sup> /kft 10869.3 L/km	117.0 ft <sup>3</sup> /kft 10869.3 L/km	69.9 ft <sup>3</sup> /kft 6493.7 L/km
Cable Weight	.70 k/m .47 lb/ft	.81 kg/m .54 lb/ft	.83 kg/m .56 lb/ft	1.48 kg/m .99 lb/ft	1.44 kg/m .97 lb/ft	2.57 kg/m 1.75 lb/ft	4.42 kg/m 2.97 lb/ft	4.48 kg/m 3.01 lb/ft	4.19 kg/m 2.81 lb/ft
Diameter Over Jacket	N/A	28.194 mm 1.110 in	27.432 mm 1.080 in	50.292 mm 1.980 in	48.514 mm 1.910 in	76.454 mm 3.010 in	132.080 mm 5.200 in	132.080 mm 5.200 in	101.600 mm 4.000 in
Inner Conductor OD	9.1440 mm 0.3600 in	9.1440 mm 0.3600 in	9.1440 mm 0.3600 in	18.0340 mm 0.7100 in	18.0340 mm 0.7100 in	28.9560 mm 1.1400 in	43.6880 mm 1.7200 in	52.5780 mm 2.0700 in	39.3700 mm 1.5500 in
Outer Conductor OD	25.400 mm 1.000 in	25.400 mm 1.000 in	25.400 mm 1.000 in	46.482 mm 1.830 in	46.482 mm 1.830 in	72.390 mm 2.850 in	127.000 mm 5.000 in	127.000 mm 5.000 in	97.536 mm 3.840 in

# H5-50

## Specifications

H5-50, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 7/8 in, un-jacketed



H5-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	22.2 pF/ft   72.8 pF/m
dc Resistance, Inner Conductor	0.820 ohms/km   0.250 ohms/kft
dc Resistance, Outer Conductor	0.656 ohms/km   0.200 ohms/kft
dc Test Voltage	6000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	N/A
Operating Frequency Band	1 – 5200 MHz
Peak Power	90.0 kW
Power Attenuation	2.781
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	33.9 N-m   25.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	250.0 lb/in   4.5 kg/mm
Minimum Bend Radius, Multiple Bends	254.00 mm   10.00 in
Number of Bends, minimum	15
Number of Bends, typical	20
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	363 kg   800 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.082	0.025	90
1	0.116	0.035	78.44
1.5	0.143	0.043	63.98
2	0.165	0.05	55.36
10	0.372	0.113	24.56
20	0.529	0.161	17.26
30	0.65	0.198	14.03
50	0.846	0.258	10.79
85	1.113	0.339	8.19
88	1.134	0.346	8.05
100	1.212	0.369	7.53
108	1.262	0.385	7.23
150	1.499	0.457	6.09
174	1.621	0.494	5.63
200	1.746	0.532	5.23
204	1.764	0.538	5.17
300	2.168	0.661	4.21
400	2.532	0.772	3.6
450	2.7	0.823	3.38
500	2.86	0.872	3.19
512	2.897	0.883	3.15
600	3.161	0.963	2.89
700	3.442	1.049	2.65
800	3.708	1.13	2.46
824	3.769	1.149	2.42

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
894	3.946	1.203	2.31
960	4.107	1.252	2.22
1000	4.203	1.281	2.17
1218	4.7	1.432	1.94
1250	4.77	1.454	1.91
1500	5.296	1.614	1.72
1700	5.694	1.735	1.6
1800	5.886	1.794	1.55
2000	6.26	1.908	1.46
2100	6.442	1.964	1.42
2200	6.621	2.018	1.38
2300	6.798	2.072	1.34
2500	7.142	2.177	1.28
2700	7.478	2.279	1.22
3000	7.965	2.428	1.15
3400	8.592	2.619	1.06
3700	9.045	2.757	1.01
4000	9.488	2.892	0.96
5000	10.893	3.32	0.84

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

ISO 9001:2008  
Designed, manufactured and distributed under this quality management system

### Air connectors

Part number	Description
H5FB-014-S	7/8 in EIA female Flange with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5FPB-110-S	1-5/8 in EIA Female Flange without gas barrier for 7/8 in HJ5-50 air dielectric cables
H5PDF-S	7-16 DIN Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PDM-S	7-16 DIN Male for with gas barrier 7/8 in HJ5-50 air dielectric cable
H5PNF-S	Type N Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PNM-S	Type N Male with gas barrier for 7/8 in HJ5-50 air dielectric cable

### Hoisting grips

Part number	Description
19256B	Lace-up Hoisting Grip for 7/8 in coaxial cable, elliptical waveguide 77, and HELIAX® FiberFeed® Hybrid cable

### Hangers

Part number	Description
42396A-5	Butterfly Hanger for 7/8 in coaxial cable and elliptical waveguide 85 and 90
SSH-78	SnapStak® Hanger for 7/8 in coaxial cable

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Grounding kits

Part number	Description
SG78-12B2U	SureGround® Grounding Kit for 7/8 in coaxial cable

### Entry panel

Part number	Description
SEC-378	Single Entrance Assembly for 7/8 in coaxial cable

Visit [www.commscope.com](http://www.commscope.com) for additional installation accessories

# HJ5-50

## Specifications

HJ5-50, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 7/8 in, black PE jacket



HJ5-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	22.2 pF/ft   72.8 pF/m
dc Resistance, Inner Conductor	0.820 ohms/km   0.250 ohms/kft
dc Resistance, Outer Conductor	0.656 ohms/km   0.200 ohms/kft
dc Test Voltage	6000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 5200 MHz
Peak Power	90.0 kW
Power Attenuation	2.781
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	33.9 N-m   25.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	250.0 lb/in   4.5 kg/mm
Minimum Bend Radius, Multiple Bends	254.00 mm   10.00 in
Number of Bends, minimum	15
Number of Bends, typical	20
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	363 kg   800 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.082	0.025	90
1	0.116	0.035	78.44
1.5	0.143	0.043	63.98
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30	0.65	0.198	14.03
50	0.846	0.258	10.79
85	1.113	0.339	8.19
88	1.134	0.346	8.05
100	1.212	0.369	7.53
108	1.262	0.385	7.23
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174	1.621	0.494	5.63
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600	3.161	0.963	2.89
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Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
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2700	7.478	2.279	1.22
3000	7.965	2.428	1.15
3400	8.592	2.619	1.06
3700	9.045	2.757	1.01
4000	9.488	2.892	0.96
5000	10.893	3.32	0.84

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

ISO 9001:2008 Designed, manufactured and or distributed under this quality management system

# HJ5-50

## Related products

### Air connectors

Part number	Description
H5FB-014-S	7/8 in EIA female Flange with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5FPB-110-S	1-5/8 in EIA Female Flange without gas barrier for 7/8 in HJ5-50 air dielectric cables
H5PDF-S	7-16 DIN Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PDM-S	7-16 DIN Male for with gas barrier 7/8 in HJ5-50 air dielectric cable
H5PNF-S	Type N Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PNM-S	Type N Male with gas barrier for 7/8 in HJ5-50 air dielectric cable

### Hoisting grips

Part number	Description
19256B	Lace-up Hoisting Grip for 7/8 in coaxial cable, elliptical waveguide 77, and HELIAX® FiberFeed® Hybrid cable

### Hangers

Part number	Description
42396A-5	Butterfly Hanger for 7/8 in coaxial cable and elliptical waveguide 85 and 90
SSH-78	SnapStak® Hanger for 7/8 in coaxial cable

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Grounding kits

Part number	Description
SG78-12B2U	SureGround® Grounding Kit for 7/8 in coaxial cable

### Entry panel

Part number	Description
SEC-378	Single Entrance Assembly for 7/8 in coaxial cable

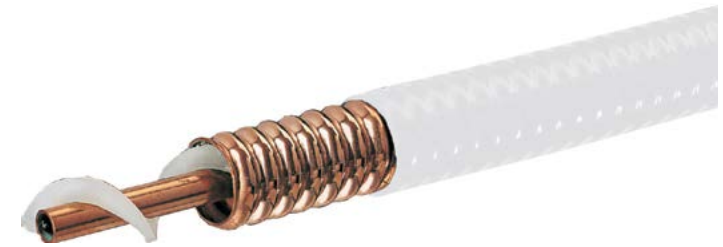
Visit [www.commscope.com](http://www.commscope.com) for additional installation accessories



# HJ5RPV-50

## Specifications

HJ5RPV-50, HELIAX® Plenum Rated Air Dielectric Coaxial Cable, corrugated copper, 7/8 in, off-white PVC jacket



HJ5RPV-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm
Capacitance	22.2 pF/ft   72.8 pF/m
dc Resistance, Inner Conductor	0.820 ohms/km   0.250 ohms/kft
dc Resistance, Outer Conductor	0.656 ohms/km   0.200 ohms/kft
dc Test Voltage	6000 V
Inductance	1.870 μH/m   0.570 μH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	8000 V
Operating Frequency Band	1 – 5200 MHz
Peak Power	90.0 kW
Power Attenuation	2.781
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-5 °C to +60 °C (+23 °F to +140 °F)
Operating Temperature	-20 °C to +85 °C (-4 °F to +185 °F)
Storage Temperature	-20 °C to +85 °C (-4 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	33.9 N-m   25.0 ft lb
Fire Retardancy Test Method	NFPA 262/CATVP/CMP
Flat Plate Crush Strength	250.0 lb/in   4.5 kg/mm
Minimum Bend Radius, Multiple Bends	254.00 mm   10.00 in
Number of Bends, minimum	15
Number of Bends, typical	20
Pressurization, maximum	0 N/mm <sup>2</sup>   30 psi
Tensile Strength	363 kg   800 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.082	0.025	90
1	0.116	0.035	78.44
1.5	0.143	0.043	63.98
2	0.165	0.05	55.36
10	0.372	0.113	24.56
20	0.529	0.161	17.26
30	0.65	0.198	14.03
50	0.846	0.258	10.79
85	1.113	0.339	8.19
88	1.134	0.346	8.05
100	1.212	0.369	7.53
108	1.262	0.385	7.23
150	1.499	0.457	6.09
174	1.621	0.494	5.63
200	1.746	0.532	5.23
204	1.764	0.538	5.17
300	2.168	0.661	4.21
400	2.532	0.772	3.6
450	2.7	0.823	3.38
500	2.86	0.872	3.19
512	2.897	0.883	3.15
600	3.161	0.963	2.89
700	3.442	1.049	2.65
800	3.708	1.13	2.46
824	3.769	1.149	2.42

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
894	3.946	1.203	2.31
960	4.107	1.252	2.22
1000	4.203	1.281	2.17
1218	4.7	1.432	1.94
1250	4.77	1.454	1.91
1500	5.296	1.614	1.72
1700	5.694	1.735	1.6
1800	5.886	1.794	1.55
2000	6.26	1.908	1.46
2100	6.442	1.964	1.42
2200	6.621	2.018	1.38
2300	6.798	2.072	1.34
2500	7.142	2.177	1.28
2700	7.478	2.279	1.22
3000	7.965	2.428	1.15
3400	8.592	2.619	1.06
3700	9.045	2.757	1.01
4000	9.488	2.892	0.96
5000	10.893	3.32	0.84

\* Values typical, guaranteed within 5%

UL/ETL Certification CATVP/CMP

ISO 9001:2008 Designed, manufactured and or distributed under this quality management system



# HJ5RPV-50

## Related products

### Air connectors

Part number	Description
H5FB-014-S	7/8 in EIA female Flange with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5FPB-110-S	1-5/8 in EIA Female Flange without gas barrier for 7/8 in HJ5-50 air dielectric cables
H5PDF-S	7-16 DIN Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PDM-S	7-16 DIN Male for with gas barrier 7/8 in HJ5-50 air dielectric cable
H5PNF-S	Type N Female with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5PNM-S	Type N Male with gas barrier for 7/8 in HJ5-50 air dielectric cable

### Hoisting grips

Part number	Description
19256B	Lace-up Hoisting Grip for 7/8 in coaxial cable, elliptical waveguide 77, and HELIAX® FiberFeed® Hybrid cable

### Hangers

Part number	Description
SSH-78	SnapStak® Hanger for 7/8 in coaxial cable
42396A-2	Butterfly Hanger for 1-5/8 in coaxial cable

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Grounding kits

Part number	Description
SG78-12B2U	SureGround® Grounding Kit for 7/8 in coaxial cable

### Entry panel

Part number	Description
SEC-378	Single Entrance Assembly for 7/8 in coaxial cable

Visit [www.commscope.com](http://www.commscope.com) for additional installation accessories

# HJ7-50A

## Specifications

HJ7-50A, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper  
1-5/8 in, black PE jacket



HJ7-50A	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	22.1 pF/ft   72.5 pF/m
dc Resistance, Inner Conductor	0.722 ohms/km   0.220 ohms/kft
dc Resistance, Outer Conductor	0.328 ohms/km   0.100 ohms/kft
dc Test Voltage	11000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 2700 MHz
Peak Power	305.0 kW
Power Attenuation	3.356
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	40.7 N-m   30.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	175.0 lb/in   3.1 kg/mm
Minimum Bend Radius, Multiple Bends	508.00 mm   20.00 in
Number of Bends, minimum	15
Number of Bends, typical	30
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	340 kg   750 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.045	0.014	243.45
1	0.064	0.02	171.92
1.5	0.079	0.024	140.23
2	0.091	0.028	121.34
10	0.204	0.062	53.85
20	0.291	0.089	37.86
30	0.358	0.109	30.77
50	0.465	0.142	23.67
85	0.612	0.187	17.99
88	0.623	0.19	17.67
100	0.666	0.203	16.53
108	0.693	0.211	15.88
150	0.824	0.251	13.37
174	0.891	0.271	12.36
200	0.959	0.292	11.48
204	0.969	0.295	11.36
300	1.19	0.363	9.25
400	1.389	0.423	7.92
450	1.481	0.451	7.43
500	1.569	0.478	7.02
512	1.589	0.484	6.93
600	1.733	0.528	6.35
700	1.887	0.575	5.84
800	2.032	0.619	5.42
824	2.066	0.63	5.33

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
894	2.162	0.659	5.09
960	2.25	0.686	4.89
1000	2.302	0.702	4.78
1218	2.573	0.784	4.28
1250	2.611	0.796	4.22
1500	2.898	0.883	3.8
1700	3.114	0.949	3.54
1800	3.219	0.981	3.42
2000	3.422	1.043	3.22
2100	3.521	1.073	3.13
2200	3.619	1.103	3.04
2300	3.714	1.132	2.96
2500	3.902	1.189	2.82
2700	4.084	1.245	2.7

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

ISO 9001:2008 Designed, manufactured and or distributed under this quality management system

### Air connectors

Part number	Description
H7FB-014-S	7/8 in EIA Male Flange with gas barrier with gas barrier for 1-5/8 in HJ7-50A air dielectric cable
H7FB-110-S	1-5/8 in EIA Female Flange with gas barrier for 1-5/8 in HJ7-50A air dielectric cable
H7PDF-S	7-16 DIN Female with gas barrier for 1-5/8 in HJ7-50A air dielectric cable

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

### Hoisting grips

Part number	Description
24312A	Lace-up Hoisting Grip for 1-5/8 in coaxial cable and elliptical waveguide 44, 52, and 63

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Hangers

Part number	Description
42396A-2	Butterfly Hanger for 1-5/8 in coaxial cable
SSH-158	SnapStak® Hanger for 1-5/8 in coaxial cable

### Grounding kits

Part number	Description
SG158-12B2U	SureGround® Grounding Kit for 1-5/8 in coaxial cable

### Entry panel

Part number	Description
SCE-158	Single Entrance Assembly for 1-5/8 in coaxial cable

# HJ7RPV-50

## Specifications

HJ7RPV-50, HELIAX® Plenum Rated Air Dielectric Coaxial Cable, corrugated copper, 1-5/8 in, off-white PVC jacket



HJ7RPV-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	22.1 pF/ft   72.5 pF/m
dc Resistance, Inner Conductor	0.722 ohms/km   0.220 ohms/kft
dc Resistance, Outer Conductor	0.328 ohms/km   0.100 ohms/kft
dc Test Voltage	11000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 2700 MHz
Peak Power	305.0 kW
Power Attenuation	3.356
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-5 °C to +60 °C (+23 °F to +140 °F)
Operating Temperature	-20 °C to +85 °C (-4 °F to +185 °F)
Storage Temperature	-20 °C to +85 °C (-4 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	40.7 N-m   30.0 ft lb
Fire Retardancy Test Method	NFPA 262/CATVP/CMP
Flat Plate Crush Strength	175.0 lb/in   3.1 kg/mm
Minimum Bend Radius, Multiple Bends	508.00 mm   20.00 in
Number of Bends, minimum	15
Number of Bends, typical	30
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	340 kg   750 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.045	0.014	243.45
1	0.064	0.02	171.92
1.5	0.079	0.024	140.23
2	0.091	0.028	121.34
10	0.204	0.062	53.85
20	0.291	0.089	37.86
30	0.358	0.109	30.77
50	0.465	0.142	23.67
85	0.612	0.187	17.99
88	0.623	0.19	17.67
100	0.666	0.203	16.53
108	0.693	0.211	15.88
150	0.824	0.251	13.37
174	0.891	0.271	12.36
200	0.959	0.292	11.48
204	0.969	0.295	11.36
300	1.19	0.363	9.25
400	1.389	0.423	7.92
450	1.481	0.451	7.43
500	1.569	0.478	7.02
512	1.589	0.484	6.93
600	1.733	0.528	6.35
700	1.887	0.575	5.84
800	2.032	0.619	5.42
824	2.066	0.63	5.33

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
894	2.162	0.659	5.09
960	2.25	0.686	4.89
1000	2.302	0.702	4.78
1218	2.573	0.784	4.28
1250	2.611	0.796	4.22
1500	2.898	0.883	3.8
1700	3.114	0.949	3.54
1800	3.219	0.981	3.42
2000	3.422	1.043	3.22
2100	3.521	1.073	3.13
2200	3.619	1.103	3.04
2300	3.714	1.132	2.96
2500	3.902	1.189	2.82
2700	4.084	1.245	2.7

\* Values typical, guaranteed within 5%

UL/ETL Certification CATVP/CMP

ISO 9001:2008 Designed, manufactured and or distributed under this quality management system

# HJ7RPV-50

## Related products

### Air connectors

Part number	Description
H7FB-014-S	7/8 in EIA Male Flange with gas barrier with gas barrier for 1-5/8 in HJ7-50A air dielectric cable
H7FB-110-S	1-5/8 in EIA Female Flange with gas barrier for 1-5/8 in HJ7-50A air dielectric cable
H7PDF-S	7-16 DIN Female with gas barrier for 1-5/8 in HJ7-50A air dielectric cable

### Accessories

Part number	Description
1860A	Connector Reducer, 1-5/8 in to 7/8 in
1861	Connector Reducer, 3-1/8 in to 1-5/8 in
SCE-158	Single Entrance Assembly for 1-5/8 in coaxial cable

### Hangers

Part number	Description
42396A-2	Butterfly Hanger for 1-5/8 in coaxial cable
SSH-158	SnapStak® Hanger for 1-5/8 in coaxial cable

### Hoisting grips

Part number	Description
24312A	Lace-up Hoisting Grip for 1-5/8 in coaxial cable and elliptical waveguide 44, 52, and 63

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Grounding kits

Part number	Description
SG158-12B2U	SureGround® Grounding Kit for 1-5/8 in coaxial cable

### Entry panels

Part number	Description
SCE-158	Single Entrance Assembly for 1-5/8 in coaxial cable

### Additional cable types

Part number	Description
HJ7RP-50A	HJ7-50A, HELIAX® Plenum Rated Air Dielectric Coaxial Cable, corrugated copper, 1-5/8 in, off-white PVC jacket

Visit [www.commscope.com](http://www.commscope.com) for additional installation accessories

# HJ8-50B

## Specifications

HJ8-50B, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 3 in, black PE jacket



HJ8-50B	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	21.7 pF/ft   71.2 pF/m
dc Resistance, Inner Conductor	0.492 ohms/km   0.150 ohms/kft
dc Resistance, Outer Conductor	0.229 ohms/km   0.070 ohms/kft
dc Test Voltage	16000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 1640 MHz
Peak Power	640.0 kW
Power Attenuation	5.997
Velocity	93%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	40.7 N-m   30.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	175.0 lb/in   3.1 kg/mm
Minimum Bend Radius, Multiple Bends	762.00 mm   30.00 in
Number of Bends, minimum	15
Number of Bends, typical	25
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	340 kg   750 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	121 °C   250 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.029	0.009	640
1	0.041	0.013	475.54
1.5	0.051	0.015	387.1
2	0.059	0.018	334.39
10	0.135	0.041	146.12
20	0.194	0.059	101.58
30	0.24	0.073	81.88
50	0.317	0.096	62.16
85	0.424	0.129	46.43
88	0.432	0.132	45.55
100	0.464	0.141	42.41
108	0.484	0.148	40.62
150	0.584	0.178	33.72
174	0.635	0.194	30.96
200	0.689	0.21	28.56
204	0.697	0.212	28.24
300	0.874	0.266	22.5
400	1.039	0.317	18.93
450	1.117	0.34	17.62
500	1.192	0.363	16.51
512	1.209	0.369	16.27
600	1.335	0.407	14.74
700	1.47	0.448	13.38
800	1.601	0.488	12.29
824	1.631	0.497	12.06

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
894	1.719	0.524	11.45
960	1.8	0.549	10.93
1000	1.849	0.563	10.64
1218	2.104	0.641	9.35
1250	2.14	0.652	9.19
1500	2.418	0.737	8.14

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

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## Air connectors

Part number	Description
H8FB-302-S	3-1/8 in EIA Female Flange with gas barrier for 3 in HJ8-50B air dielectric cable

## Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

## Hoisting grips

Part number	Description
26985A	Lace-up Hoisting Grip for 3 in coaxial cable and elliptical waveguide 28 and 34

## Grounding kits

Part number	Description
223700-724	Standard Grounding Kit for 2-1/4 in and 3 in corrugated coaxial cable and elliptical waveguide 28 and 37

## Hangers

Part number	Description
31766A-11	Butterfly Hanger for 3 in coaxial cable and elliptical waveguide 28

## Entry panels

Part number	Description
40394-2	Single Entrance Panel for 3 in coaxial cable

## Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware
31769-5	Hardware Kit for Standard Hangers, includes 3/8 in hex head, .75 inch bolts and hardware

## Boot assemblies

Part number	Description
48939A-10	Boot Assembly, 5 in, for 3 in air corrugated coaxial cable



# HJ9-50

## Specifications

HJ9-50, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 5 in, black PE jacket



HJ9-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	21.7 pF/ft   71.2 pF/m
dc Resistance, Inner Conductor	0.328 ohms/km   0.100 ohms/kft
dc Resistance, Outer Conductor	0.131 ohms/km   0.040 ohms/kft
dc Test Voltage	27500 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	12000 V
Operating Frequency Band	1 – 960 MHz
Peak Power	1890.0 kW
Power Attenuation	6.661
Velocity	93%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	271.2 N-m   200.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	275.0 lb/in   4.9 kg/mm
Minimum Bend Radius, Multiple Bends	1270.00 mm   50.00 in
Number of Bends, minimum	15
Number of Bends, typical	30
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	454 kg   1000 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	100 °C   212 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.017	0.005	1273.93
1	0.024	0.007	898.92
1.5	0.03	0.009	732.79
2	0.034	0.011	633.76
10	0.078	0.024	279.93
20	0.111	0.034	196.13
30	0.137	0.042	159.03
50	0.179	0.055	121.84
85	0.237	0.072	92.09
88	0.242	0.074	90.41
100	0.259	0.079	84.46
108	0.27	0.082	81.05
150	0.322	0.098	67.93
174	0.349	0.106	62.68

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
200	0.376	0.115	58.1
204	0.38	0.116	57.48
300	0.47	0.143	46.47
400	0.552	0.168	39.57
450	0.59	0.18	37.02
500	0.627	0.191	34.87
512	0.635	0.194	34.4
600	0.696	0.212	31.42
700	0.76	0.232	28.74
800	0.822	0.25	26.59
824	0.836	0.255	26.14
960	0.877	0.267	24.91
1000	0.915	0.279	23.89

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

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### Air connectors

Part number	Description
79AZ	Splice for 5 in HJ9-50 air dielectric cable
H9FB-602	6-1/8 in EIA Female Flange with gas barrier for 5 in HJ9-50 air dielectric cable
H9FB-602-S	6-1/8 in EIA Female Flange with gas barrier for 5 in HJ9-50 air dielectric cable
H9FB-M408-S	4-1/2 in IEC Female Flange with gas barrier for 5 in HJ9-50 air dielectric cable
H9FP-602	6-1/8 in EIA Female Flange without gas barrier for 5 in HJ9-50 air dielectric cable
H9FP-M408	4-1/2 in IEC Female Flange without gas barrier for 5 in HJ9-50 air dielectric cable
H9MB-602	6-1/8 in EIA Male Flange with gas barrier for 5 in HJ9-50 air dielectric cable
H9MB-M408	4-1/2 in IEC Male Flange with gas barrier for 5 in HJ9-50 air dielectric cable
H9MP-602	6-1/8 in EIA Male Flange without gas barrier for 5 in HJ9-50 air dielectric cable
H9MP-M408	4-1/2 in IEC Male Flange without gas barrier for 5 in HJ9-50 air dielectric cable

### Hardware

Part number	Description
31769-4	Hardware Kit for Standard Hangers, 1/2 x 1-1/4 in bolts

### Grounding kits

Part number	Description
204989-7	Standard Grounding Kit for 5 in corrugated coaxial cable

### Hoisting grips

Part number	Description
31031-1	Lace-up Hoisting Grip for 5 in coaxial cable

### Entry panels

Part number	Description
33938-5	Single Entrance Panel for 5 in coaxial cable

### Hangers

Part number	Description
33598-5	Butterfly Hanger for 5 in coaxial cable and elliptical waveguide 20

# HJ9HP-50

## Specifications

HJ9HP-50, HELIAX® High Power Air Dielectric Coaxial Cable, corrugated copper, 5 in, black PE jacket



HJ9HP-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	20.8 pF/ft   68.2 pF/m
dc Resistance, Inner Conductor	0.328 ohms/km   0.100 ohms/kft
dc Resistance, Outer Conductor	0.131 ohms/km   0.040 ohms/kft
dc Test Voltage	26000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	12000 V
Operating Frequency Band	1 – 960 MHz
Peak Power	1690.0 kW
Power Attenuation	13.348
Velocity	96%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	271.2 N-m   200.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	240.0 lb/in   4.3 kg/mm
Minimum Bend Radius, Multiple Bends	1270.00 mm   50.00 in
Number of Bends, minimum	15
Number of Bends, typical	30
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	454 kg   1000 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	150 °C   302 °F

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.015	0.004	1690
1	0.021	0.006	1690
1.5	0.026	0.008	1690
2	0.03	0.009	1464.04
10	0.069	0.021	634.44
20	0.1	0.03	438.43
30	0.124	0.038	351.85
50	0.165	0.05	265.33
85	0.223	0.068	196.5
88	0.227	0.069	192.62
100	0.245	0.075	178.93
108	0.256	0.078	171.11
150	0.31	0.095	141.08
174	0.339	0.103	129.13

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
200	0.369	0.112	118.74
204	0.373	0.114	117.33
300	0.473	0.144	92.58
400	0.567	0.173	77.25
450	0.611	0.186	71.64
500	0.654	0.199	66.93
512	0.664	0.203	65.91
600	0.737	0.225	59.42
700	0.816	0.249	53.66
800	0.893	0.272	49.07
824	0.91	0.278	48.1
960	0.962	0.293	45.52
1000	1.01	0.308	43.36

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

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# HJ9HP-50

## Related products

### Air connectors

Part number	Description
H9HPFB-602	6-1/8 in EIA Female Flange with gas barrier for 5 in HJ9HP-50 high power air dielectric cable
H9HPFB-602-S	6-1/8 in EIA Female Flange with gas barrier for 5 in HJ9HP-50 high power air dielectric cable
H9HPMB-602	6-1/8 in EIA Male Flange with gas barrier for 5 in HJ9HP-50 high power air dielectric cable
H9HPMP-602	6-1/8 in EIA Male Flange without gas barrier for 5 in HJ9HP-50 high power air dielectric cable
H9HPZ	Splice for 5 in HJ9HP-50 high power air dielectric cable

### Hoisting grips

Part number	Description
31031-1	Lace-up Hoisting Grip for 5 in coaxial cable

### Hangers

Part number	Description
33598-5	Butterfly Hanger for 5 in coaxial cable and elliptical waveguide 20

### Hardware

Part number	Description
31769-4	Hardware Kit for Standard Hangers, 1/2 x 1-1/4 in bolts

### Adapters

Part number	Description
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Grounding kits

Part number	Description
204989-7	Standard Grounding Kit for 5 in corrugated coaxial cable

### Entry panels

Part number	Description
33938-5	Single Entrance Panel for 5 in coaxial cable

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# HJ11-50

## Specifications

HJ11-50, HELIAX® Standard Air Dielectric Coaxial Cable, corrugated copper, 4 in, black PE jacket

HJ11-50	
<b>Electrical Specifications</b>	
Cable Impedance	50 ohm ±0.5 ohm
Capacitance	22.0 pF/ft   72.2 pF/m
dc Resistance, Inner Conductor	0.361 ohms/km   0.110 ohms/kft
dc Resistance, Outer Conductor	0.131 ohms/km   0.040 ohms/kft
dc Test Voltage	21000 V
Inductance	1.870 µH/m   0.570 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1-1220 MHz
Peak Power	1100.0 kW
Power Attenuation	7.398
Velocity	92%
<b>Environmental Specifications</b>	
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
<b>General Specifications</b>	
Brand	HELIAX®
<b>Mechanical Specifications</b>	
Bending Moment	259.0 N-m   191.0 ft lb
Fire Retardancy Test Method	N/A
Flat Plate Crush Strength	280.0 lb/in   5.0 kg/mm
Minimum Bend Radius, Multiple Bends	1016.00 mm   40.00 in
Number of Bends, minimum	15
Number of Bends, typical	30
Pressurization, maximum	0 N/mm²   30 psi
Tensile Strength	408 kg   900 lb
Performance Note	Values typical, unless otherwise stated
<b>Standard Conditions</b>	
Attenuation, Ambient Temperature	20 °C   68 °F
Average Power, Ambient Temperature	40 °C   104 °F
Average Power, Inner Conductor Temperature	121 °C   250 °F



Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.024	0.007	999.85
1	0.034	0.01	704.91
1.5	0.042	0.013	574.25
2	0.049	0.015	496.37
10	0.111	0.034	218.15
20	0.159	0.049	152.28
30	0.197	0.06	123.13
50	0.258	0.079	93.93
85	0.344	0.105	70.6
88	0.35	0.107	69.28
100	0.376	0.114	64.62
108	0.392	0.119	61.95
150	0.47	0.143	51.68
174	0.51	0.155	47.58

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
200	0.552	0.168	44
204	0.558	0.17	43.52
300	0.695	0.212	34.94
400	0.821	0.25	29.57
450	0.88	0.268	27.6
500	0.936	0.285	25.93
512	0.949	0.289	25.57
600	1.044	0.318	23.26
700	1.145	0.349	21.19
800	1.242	0.379	19.54
824	1.265	0.386	19.19
894	1.33	0.405	18.25
960	1.39	0.424	17.46
1000	1.426	0.435	17.03

\* Values typical, guaranteed within 5%

UL/ETL Certification N/A

ISO 9001:2008 Designed, manufactured and or distributed under this quality management system

# HJ11-50

## Related products

### Air connectors

Part number	Description
H11FB-302-S	3-1/8 in EIA Female Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11FB-602-S	6-1/8 in EIA Female Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11FB-M408-S	4-1/2 in IEC Female Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11MB-302	3-1/8 in EIA Male Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11MB-602	6-1/8 in EIA Male Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11MB-M408	4-1/2 in IEC Male Flange with gas barrier for 4 in HJ11-50 air dielectric cable
H11MP-302	3-1/8 in EIA Male Flange without gas barrier for 4 in HJ11-50 air dielectric cable
H11MP-602	6-1/8 in EIA Male Flange without gas barrier for 4 in HJ11-50 air dielectric cable
H11MP-M408	4-1/2 in IEC Male Flange without gas barrier for 4 in HJ11-50 air dielectric cable

### Hardware

Part number	Description
31769-1	Hardware Kit for Standard Hangers, includes 3/8 in hex head, 1 inch bolts and hardware

### Adapters

Part number	Description
31768A	Angle Adapter, standard, 3/8 in tapped hole
TTS3-56	Three-way Stand-off Adapter for 5-6 in round members

### Hoisting grips

Part number	Description
34759	Lace-up Hoisting Grip for 4 in coaxial cable and elliptical waveguide 17 and 20

### Grounding kits

Part number	Description
204989-6	Standard Grounding Kit for 4 in corrugated coaxial cable and elliptical waveguide 17 and 20

### Hangers

Part number	Description
31766A-10	Butterfly Hanger for 4 in coaxial cable and elliptical waveguide 20

### Entry panels

Part number	Description
40394-1	Single Entrance Panel for 4 in coaxial cable

Visit [www.commscope.com](http://www.commscope.com) for additional installation accessories

## Connectors

Part number	Description
H11FB-302-S	H11 3-1/8 EIA Connector {BN977980}
H11FB-602-S	H11 6-1/8 EIA Connector {BN841480}
H11FB-M408-S	H11 4-1/2 EIA Connector {BN838680}
H5PDF-S	H5 7/16 DIN Female Connector {BN491080}
H5PNF-S	H5 7/16 DIN Female Connector {BN491780}
H5PNM-S	H5 N MALE Connector {BN492180}
H7PDF-S	H7 7/16 DIN Female Connector {BN690780}
H8FB-302-S	H8 3-1/8 EIA Connector {BN930080}
H9FB-602-S	H9 6-1/8" EIA Connector {BN656780}
H9FB-M408-S	H9 4-1/2 EIA Connector {BN658280}
H7FB-110-S	H7 1-5/8 EIA Connector {BN936580}
H9HPFB-602-S	6-1/8 EIA H9HP Connector {BN656781}
H5FB-014-S	7/8 in EIA female Flange with gas barrier for 7/8 in HJ5-50 air dielectric cable
H5FPB-110-S	1-5/8 in EIA Female Flange without gas barrier for 7/8 in HJ5-50 air dielectric cables
H5PDM-S	7-16 DIN Male for with gas barrier 7/8 in HJ5-50 air dielectric cable
H7FB-014-S	7/8 in EIA Male Flange with gas barrier with gas barrier for 1-5/8 in HJ7-50A air dielectric cable

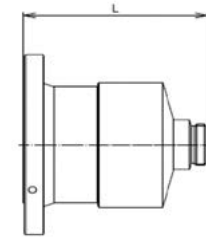
## Coupling elements

Part number	Description
BN-911715	7/8 EIA Coupling Element, O-Ring, screw-set
BN-918311	1 5/8 EIA Coupling Element, O-Ring, screw-set
BN-918710	3 1/8 EIA Coupling Element, O-Ring, screw-set
BN-822810	4 1/2 IEC Coupling Element, O-Ring, screw-set
BN-919310	6 1/8 EIA Coupling Element, O-Ring, screw-set



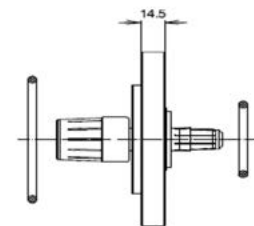
# Spinner adapters

Connector 1		Connector 2		Length L	Weight	Part number
N	Female	SMA	Male	20,7 mm	0,028 kg	BN 64 06 82
N	Female	N	Female	36,2 mm	0,040 kg	BN 29 37 50
7-16	Male	N	Male	30,7 mm	0,083 kg	BN 29 38 00
7-16	Male	N	Female	15,3 mm	0,073 kg	BN 19 44 00
7-16	Female	N	Male	34,9 mm	0,074 kg	BN 29 39 00
7-16	Female	N	Female	24,5 mm	0,078 kg	BN 29 40 00
7-16	Female	7-16	Female	29,0 mm	0,088 kg	BN 19 64 00
7/8	EIA	N	Female	59,1 mm	0,25 kg	BN 90 25 00
7/8	EIA	7-16	Female	58,2 mm	0,24 kg	BN 80 56 00
7/8	EIA	7-16	Male	47,2 mm	0,24 kg	BN 81 80 00
1 5/8	EIA	N	Female	84,7 mm	0,81 kg	BN 90 36 00
1 5/8	EIA	7-16	Female	82,4 mm	0,86 kg	BN 90 92 00
1 5/8	EIA	7/8	EIA	108,5 mm	1,13 kg	BN 91 21 00
1 5/8	EIA	13-30	Female	115,9 mm	1,21 kg	BN 91 43 00
1 5/8	EIA	13-30	Male	105,5 mm	1,19 kg	BN 91 42 00
3 1/8	EIA	N	Female	113,0 mm	2,28 kg	BN 94 57 00
3 1/8	EIA	7-16	Female	119,7 mm	2,40 kg	BN 90 93 08
3 1/8	EIA	1 5/8	EIA	152,0 mm	3,49 kg	BN 91 75 00
4 1/2	IEC	7-16	Female	180,0 mm	4,66 kg	BN 72 89 00
4 1/2	IEC	3 1/8	EIA	177,0 mm	5,69 kg	BN 71 50 00
6 1/8	EIA	3 1/8	EIA	194,0 mm	8,15 kg	BN 91 89 00



## Adaptors in short length version, with built-in coupling element

Connector 1		Connector 2		Length L	Weight	Part number
1 5/8	EIA	7-16	Female	34,9 mm	0,61 kg	BN 10 74 10
1 5/8	EIA	7/8	EIA	24,00 mm	0,83 kg	BN 91 21 10
3 1/8	EIA	1 5/8	EIA	15,00 mm	2,01 kg	BN 91 75 10
4 1/2	IEC	3 1/8	EIA	21,75 mm	3,50 kg	BN 71 50 10
6 1/8	EIA	7-16	Female	109,9 mm	6,51 kg	BN 90 94 04
6 1/8	EIA	3 1/8	EIA	35,75 mm	5,73 kg	BN 91 89 10
6 1/8	EIA	4 1/2	EIA1	39,95 mm	6,28 kg	BN 71 49 10



# Elliptical waveguide cable

Part number	Description
HELIAX standard elliptical waveguide Black PE Jacket	
EW52	5.6–6.425 GHz
EW63	5.925–7.125 GHz
EW64	6.425–7.75 GHz
EW90	10.2–11.7 GHz
EW180	17.3–19.7 GHz
EW220	21.2–23.6 GHz
HELIAX premium waveguide Black PE Jacket	
EWP52-50	5.0–5.85 GHz
EWP52-56	5.6–6.2 GHz
EWP52-58	5.725–6.425 GHz
EWP52-59	5.925–6.425 GHz
EWP63-59	5.925–6.575 GHz
EWP63-59W	5.8–7.125 GHz
EWP63-65	6.425–7.125 GHz
EWP90-105	10.2–10.7 GHz
EWP90-105W	10.5–11.7 GHz
EWP90-107	10.7–11.7 GHz
EWP180-180	17.7–19.7 GHz
EWFTK-52	<b>Flaring Tool Kit</b> For elliptical waveguide 52
EWFTK-63	<b>Flaring Tool Kit</b> For elliptical waveguide 63

# Elliptical waveguide connectors

Description	Elliptical waveguide	Part number
Elliptical Waveguide Connectors Fixed-tuned		
UG-595/U	180	1180SC
	220	1220ASC
PBR220	180	1180SCM
	220	1220ASCM
PDR100	90	190SEM
PDR70	52	252SEM
CPR137G	63	163SE
	64	164SE
CPR159G	52	152SE
CPR90G	90	190SE
<b>Splice</b>	52	152DZ
	63	163DZ
<b>Hardware Kits</b>		
For 152 or 252 connectors		45594-152B
For 163 connectors		45594-163B



Elliptical waveguide cable

Flaring tool kit

Elliptical waveguide connector

## Connector reattachment kits

Part number	Description
33544-33	For elliptical waveguide 63
33544-37	For elliptical waveguide 90
33544-38	For elliptical waveguide 52
33544-42	For elliptical waveguide 180



Connector reattachment kit

## Hangers/Angle adapters

Part number	Description
Universal snap-in hanger	
EWSH-63	For elliptical waveguide 63
EWSH-90	For elliptical waveguide 90
EWSH-127A	For elliptical waveguide 52
EWSH-180	For elliptical waveguide 180
EWSH-220	For elliptical waveguide 220
Angle adapter	
243684	Compact 3/8" tapped hole



Hanger/Angle adapter

# Pressurization products

Part number	Description	
HR150 HR300	Heat Regeneration	See specs
MT050C	High-pressure, 3.0–5.0 psig 19" rack-mount	See specs
MT500D		See specs
SAHARA2A	Large System Dehydrator	See specs
6600D-2	<b>Distribution Manifold</b> Wall mountable, 0–15.0 psig, 25 ft of tubing per port	2-Port
6600D-4		4-Port
6600D-6		6-Port
AE01K-D0840-050	<b>Polyethylene Tube</b> 3/8" OD x 1/16" wall, black	50' roll
AE01K-D0840-500		500' roll

## HR300 Specifications

Dehydrator Type Automatically regenerating Desiccant  
 Volume Capacity, maximum 1000.0 L | 35.3 ft<sup>3</sup>  
 Cut In/Out Pressure Type Continuous (default set to 3.0 kPa | 0.4 psig)  
 Flow Rate, nominal 300.00 SLPH | 10.60 SCFH  
 Mount Type Rack  
 Port Count 4  
 Port Type 3/8 in PE tube  
 Rack Type EIA 19 in | ETSI N3 (optional)  
 Rack Units 2  
 Regulated Output Pressure Type factory set, continuous  
 Power Cord dc power cord  
 Voltage 48–60 Vdc ±10%  
 Alarm Contact Rating Handles at least 0.5 A (ac or dc)  
 Operating Temperature -5 °C to +50 °C (+23 °F to +122 °F)  
 Power Consumption, maximum 45.0 W



**HR300-BOOST**  
 Booster unit for HR300. Doubles maximum system volume capability

## HR150 Specifications

Dehydrator Type Automatically regenerating Desiccant  
 Volume Capacity, maximum 600.0 L | 21.2 ft<sup>3</sup>  
 Cut In/Out Pressure Type Continuous (default set to 3.0 kPa | 0.4 psig)  
 Flow Rate, nominal 150.00 SLPH | 5.30 SCFH  
 Mount Type Rack  
 Port Count 4  
 Port Type 3/8 in PE tube  
 Rack Type EIA 19 in | ETSI N3 (optional)  
 Rack Units 2  
 Regulated Output Pressure Type factory set, continuous  
 Power Cord dc power cord  
 Voltage 48–60 Vdc ±10%  
 Alarm Contact Rating Handles at least 0.5 A (ac or dc)  
 Operating Temperature -5 °C to +50 °C (+23 °F to +122 °F)  
 Power Consumption, maximum 45.0 W



## MT050C Specifications

Dehydrator Type Automatic Membrane  
 Voltage Type ac  
 Volume Capacity, minimum 0.0 L | 0.0 ft<sup>3</sup>  
 Volume Capacity, maximum 1699.0 L | 60.0 ft<sup>3</sup>  
 Brand DryLine®  
 Dew Point Better than -45 °C (-50 °F) at 95% RH at +40 °C (+104 °F)  
 Flow Rate, nominal 3.40 SLPM | 0.12 SCFM  
 Includes 3/8 in polyethylene tubing | 90° elbow fitting | Instruction sheet | Male connector fitting | Needle valve | Power cord | PTFE tape  
 Mount Type Bench | Floor | Rack | Wall  
 Port Count 4  
 Port Type 3/8 in PE tube  
 Rack Type EIA 19 in | ETSI N3 (optional)  
 Rack Units 4  
 Can be reconfigured for wall mounting  
 Regulated Output Pressure Type factory set  
 Regulated Output Pressure, maximum 42.0 kPa | 6.0 psi  
 Regulated Output Pressure, minimum 14.0 kPa | 2.0 psi



## MT500D Specifications

Dehydrator Type Automatic Membrane  
Voltage Type ac  
Volume Capacity, minimum 283.2 L | 10.0 ft<sup>3</sup>  
Volume Capacity, maximum 3398.0 L | 120.0 ft<sup>3</sup>  
Brand DryLine®  
Cut In/Out Pressure Type Factory set  
Cut In Pressure 14.0 kPa | 2.0 psig  
Cut In Pressure Default 14.0 kPa | 2.0 psig  
Cut Out Pressure 34.5 kPa | 5.0 psig  
Cut Out Pressure Default 34.5 kPa | 5.0 psig  
Dew Point Better than -45 °C (-50 °F) at 95% RH at +40 °C (+104 °F)  
Flow Rate, nominal 14.20 SLPM | 0.50 SCFM  
Includes 3/8 in polyethylene tubing | 90° elbow fitting | Instruction sheet | Male connector fitting | Needle valve | Power cord | PTFE tape  
Mount Type Bench | Floor | Rack | Wall  
Port Count 4  
Port Type 3/8 in PE tube  
Rack Type EIA 19 in | ETSI N3 (optional)  
Rack Units 4  
Can be reconfigured for wall mounting



## 6600D-4 (also 2 or 6) Specifications

Distribution System Manifold  
Port Count 4  
Includes 3/8 in polyethylene tubing | 90° elbow fitting | Cable tie | Male connector fitting | PTFE tape  
Mount Type Wall  
Port Type 3/8 in PE tube  
Regulated Output Pressure, maximum 15.0 psig  
Regulated Output Pressure, minimum 0.0 psig



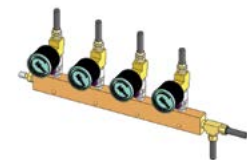
## SAHARA2A Specifications

Dehydrator Type Automatic Membrane  
Voltage Type ac  
Volume Capacity, minimum 2830.0 L | 100.0 ft<sup>3</sup>  
Volume Capacity, maximum 31150.0 L | 1100.0 ft<sup>3</sup>  
Brand DryLine®  
Cut In/Out Pressure Type Factory set  
Cut In Pressure 14.0 kPa | 2.0 psig  
Cut Out Pressure 34.0 kPa | 5.0 psig  
Dew Point Better than -45 °C (-50 °F) at 95% RH at +40 °C (+104 °F)  
Flow Rate, nominal 56.30 SLPM | 2.00 SCFM  
Includes 3/8 in polyethylene tubing | 90° elbow fitting | Ball valve | Male connector fitting | Power cord | Power cord connector lock | PTFE tape | Screws  
Mount Type Floor  
Port Count 1  
Port Type 3/8 in PE tube



## L6600D-4 (also 2) Specifications

Distribution System Manifold  
Port Count 4  
Includes 3/8 in polyethylene tubing | 90° elbow fitting | Cable tie | Instruction sheet | Male connector fitting | PTFE tape  
Mount Type Wall  
Port Type 3/8 in PE tube  
Regulated Output Pressure, maximum 5.0 psig  
Regulated Output Pressure, minimum 0.0 psig



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CO-111614-EN (05/17)