

EW64

EW64, HELIAX® Standard Elliptical Waveguide, 6.425–7.75 GHz, black PE jacket



Product Classification

Product Type	Elliptical waveguide
Product Brand	HELIAX®

General Specifications

Jacket Color	Black
Performance Note	Values typical, unless otherwise stated

Dimensions

Diameter Over Jacket (E Plane)	48.5 mm 1.909 in
Diameter Over Jacket (H Plane)	28.4 mm 1.118 in
Cable Volume	725 L/km 7.804 ft³/kft

Electrical Specifications

eTE11 Mode Cutoff	4.32 GHz
Group Delay at Frequency	125 ns/100 ft @ 7.400 GHz 411 ns/100 m @ 7.400 GHz
Operating Frequency Band	6.425 – 7.75 GHz

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
6.425–7.75 GHz	1.15	23.13
7.125–7.75 GHz	1.15	23.13

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
6.425	5.276	1.608	3.917	74
6.63	5.139	1.566	4.022	75.9

EW64

6.83	5.028	1.533	4.111	77.5
7.03	4.934	1.504	4.189	78.9
7.23	4.853	1.479	4.259	80.2
7.43	4.784	1.458	4.32	81.4
7.63	4.724	1.44	4.375	82.4

Material Specifications

Conductor Material	Corrugated copper
Jacket Material	PE

Mechanical Specifications

Minimum Bend Radius, Multiple Bends (E Plane)	260 mm 10.236 in
Minimum Bend Radius, Multiple Bends (H Plane)	685 mm 26.969 in
Minimum Bend Radius, Single Bend (E Plane)	260 mm 10.236 in
Minimum Bend Radius, Single Bend (H Plane)	685 mm 26.969 in
Maximum Twist	3.281 °/m 1 °/ft

Environmental Specifications

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)
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Temperature Rise	42 °C 107.6 °F

Packaging and Weights

Cable weight	0.73 kg/m 0.491 lb/ft
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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

