



EWP64, HELIAX® Premium Elliptical Waveguide, 7.125–7.75 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 ft ³ /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	7.125 – 7.75 GHz

Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
7.125	4.894	1.492	4.223	79.5
7.33	4.817	1.468	4.29	80.8
7.53	4.753	1.449	4.349	81.9
7.73	4.697	1.432	4.401	82.9

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
7.125–7.75 GHz	1.06	30.72

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)
Attenuation, Ambient Temperature	75 °F 23.889 °C
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
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

