

# EW64

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



**OBSOLETE**

This product was discontinued on: January 2, 2024

## Product Classification

|                       |                               |
|-----------------------|-------------------------------|
| <b>Product Type</b>   | Standard elliptical waveguide |
| <b>Product Brand</b>  | HELIAX®                       |
| <b>Product Series</b> | Standard                      |

## General Specifications

|                         |   |
|-------------------------|---|
| <b>Jacket Color</b>     | Black                                   |
| <b>Performance Note</b> | Values typical, unless otherwise stated |

## Dimensions

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

## Electrical Specifications

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

## VSWR/Return Loss

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

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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             |
| 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)  
**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

## Regulatory Compliance/Certifications

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**Agency**

CHINA-ROHS

ISO 9001:2015

REACH-SVHC

ROHS

UK-ROHS

**Classification**

Below maximum concentration value

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

Compliant as per SVHC revision on [www.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)

Compliant

Compliant

