



EWP37, HELIAX® Super Premium Elliptical Waveguide, 3.7–4.2 GHz, black PE jacket

Product Classification

| | |
|----------------------|----------------------|
| Product Type | Elliptical waveguide |
| Product Brand | HELIAX® |

General Specifications

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|-------------------------|---|
| Jacket Color | Black |
| Performance Note | Values typical, unless otherwise stated |

Dimensions

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|---------------------------------------|---|
| Diameter Over Jacket (E Plane) | 73.7 mm 2.902 in |
| Diameter Over Jacket (H Plane) | 47.2 mm 1.858 in |
| Cable Volume | 1960 L/km 21.097 ft ³ /kft |

Electrical Specifications

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|---------------------------------|--|
| eTE11 Mode Cutoff | 2.79 GHz |
| Group Delay at Frequency | 142 ns/100 ft @ 4.000 GHz 465 ns/100 m @ 4.000 GHz |
| Operating Frequency Band | 3.7 – 4.2 GHz |

VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 3.7–4.2 GHz | 1.06 | 30.72 |

Attenuation

| Frequency (GHz) | Attenuation (dB/100 m) | Attenuation (dB/100 ft) | Average Power (kW) | Group Velocity % |
|-----------------|------------------------|-------------------------|--------------------|------------------|
| 3.7 | 3.027 | 0.923 | 9.769 | 65.7 |
| 3.8 | 2.908 | 0.886 | 10.17 | 67.9 |

| | | | | |
|-----|-------|-------|--------|------|
| 3.9 | 2.81 | 0.857 | 10.522 | 69.9 |
| 4.0 | 2.729 | 0.832 | 10.834 | 71.7 |
| 4.1 | 2.661 | 0.811 | 11.112 | 73.3 |
| 4.2 | 2.603 | 0.793 | 11.361 | 74.7 |

Material Specifications

| | |
|---------------------------|-------------------|
| Conductor Material | Corrugated copper |
| Jacket Material | PE |

Mechanical Specifications

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|--|---------------------|
| Minimum Bend Radius, Multiple Bends (E Plane) | 430 mm 16.929 in |
| Minimum Bend Radius, Multiple Bends (H Plane) | 1040 mm 40.945 in |
| Minimum Bend Radius, Single Bend (E Plane) | 300 mm 11.811 in |
| Minimum Bend Radius, Single Bend (H Plane) | 760 mm 29.921 in |
| Maximum Twist | 1.64 °/m 0.5 °/ft |

Environmental Specifications

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|---|--------------------------------------|
| 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

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|---------------------|------------------------|
| Cable weight | 1.25 kg/m 0.84 lb/ft |
|---------------------|------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

