



EWP63S, HELIAX® Super Premium Elliptical Waveguide, 6.425–7.125 GHz, black non-halogenated, fire retardant polyolefin jacket

Product Classification

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

Construction Materials

| | |
|---------------------------|--|
| Jacket Material | Non-halogenated, fire retardant polyolefin |
| Conductor Material | Corrugated copper |
| Jacket Color | Black |

Dimensions

| | |
|---------------------------------------|---------------------------------------|
| Cable Volume | 855.0 L/km 9.2 ft ³ /kft |
| Cable Weight | 0.76 kg/m 0.51 lb/ft |
| Diameter Over Jacket (E Plane) | 51.10 mm 2.01 in |
| Diameter Over Jacket (H Plane) | 29.50 mm 1.16 in |

Electrical Specifications

| | |
|---------------------------------|---|
| Operating Frequency Band | 6.425 – 7.125 GHz |
| eTE11 Mode Cutoff | 4.001 GHz |
| Group Delay | 126 ns/100 ft @ 6.775 GHz 413 ns/100 m @ 6.775 GHz |

Environmental Specifications

| | |
|---------------------------------|--------------------------------------|
| Installation Temperature | -25 °C to +60 °C (-13 °F to +140 °F) |
| Operating Temperature | -30 °C to +80 °C (-22 °F to +176 °F) |
| Storage Temperature | -30 °C to +80 °C (-22 °F to +176 °F) |

Mechanical Specifications

| | |
|--|----------------------|
| Fire Retardancy Test Method | UL 1666/CATVR/CMR |
| Maximum Twist | 3.00 °/m 1.00 °/ft |
| Minimum Bend Radius, Multiple Bends (E Plane) | 260.00 mm 10.00 in |
| Minimum Bend Radius, Multiple Bends (H Plane) | 740.00 mm 29.00 in |
| Minimum Bend Radius, Single Bend (E Plane) | 180.00 mm 7.00 in |
| Minimum Bend Radius, Single Bend (H Plane) | 510.00 mm 20.00 in |
| Toxicity Index Test Method | IEC 60754-2 |

Note

Performance Note Values typical, unless otherwise stated

Standard Conditions

| | |
|---|----------------|
| Attenuation, Ambient Temperature | 24 °C 75 °F |
| Average Power, Ambient Temperature | 40 °C 104 °F |
| Average Power, Temperature Rise | 42 °C 76 °F |

Return Loss/VSWR

| Frequency Band | VSWR | Return Loss (dB) |
|-----------------|------|------------------|
| 6.425–7.125 GHz | 1.05 | 32.30 |

* VSWR/Return Loss indicated is for lengths up to 300 ft (91.4 m)

* VSWR/Return Loss is guaranteed for factory-fit and typical for field-fit assemblies

* Custom length performance: Call 828-324-2200 or 1-800-982-1708 (toll free), or your local CommScope representative

Attenuation

| Frequency (GHz) | Attenuation (dB/100 ft) | Attenuation (dB/100 m) | Average Power (kW) | Group Velocity % |
|-----------------|-------------------------|------------------------|--------------------|------------------|
| 6.4 | 1.396 | 4.58 | 4.739 | 78.2 |
| 6.6 | 1.37 | 4.496 | 4.828 | 79.7 |
| 6.8 | 1.348 | 4.423 | 4.908 | 81 |
| 7 | 1.329 | 4.36 | 4.979 | 82.2 |

Regulatory Compliance/Certifications

| Agency | Classification |
|----------------------------|--|
| UL/ETL Certification | CATVR/CMR |
| RoHS 2011/65/EU | Compliant |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| China RoHS SJ/T 11364-2014 | Below Maximum Concentration Value (MCV) |

