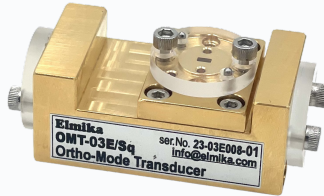


Ortho-Mode Transducer 75-110 GHz | WR10 Waveguide



TECHNICAL SPECIFICATIONS

<ul style="list-style-type: none">• Frequency Range 75-110 GHz• Operating Principle Ortho-mode transduction with dual-polarization capability• Insertion Loss Minimal signal degradation across operating band• Mechanical Interface Standard WR10 waveguide flanges for direct integration	<ul style="list-style-type: none">• Waveguide Standard WR10 rectangular waveguide• Polarization Separation Independent H-plane and E-plane signal paths• Port Impedance 50 Ohm waveguide interfaces• Environmental Sealed construction for field deployment
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APPLICATIONS

Satellite Communications (SATCOM): Dual-polarization payload multiplexing and frequency reuse architectures	5G/6G Infrastructure: mmWave backhaul and fronthaul systems requiring polarization diversity	Radar Systems: Simultaneous orthogonal polarization transmission for enhanced target discrimination
Remote Sensing: Polarimetric imaging and atmospheric measurement platforms	Defense Applications: Electronic warfare and secure communication systems	Laboratory Testing: Characterization of polarization-dependent device performance