

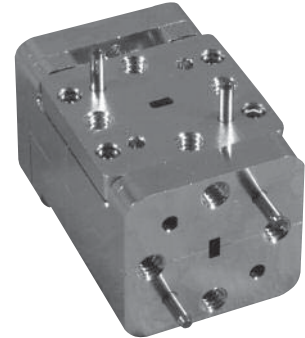


# Full Waveguide Band Orthomode Transducer

## QOT

### Characteristics

- ◆ Full Waveguide Bandwidth
- ◆ High Isolation
- ◆ Low Insertion Loss
- ◆ Compact
- ◆ Low VSWR



### Product Description

QuinStar Technology offers **QOT** Series **orthomode transducers** covering full waveguide bands from K band through W band covering 18 to 110 GHz in seven bands. These orthomode transducers (OMT) are used to separate a signal applied to the circular waveguide input port into its two linear orthogonal components at the rectangular waveguide output ports with greater than 32 dB isolation between the polarizations. In reverse, two orthogonal linearly polarized signals can be combined, producing an output in the circular waveguide port. The resulting

polarization may be linear, circular or elliptical depending on the relative phase and amplitude of the two orthogonal input signals.

Typical insertion loss of these orthomode transducers is less than 0.5 dB over the full waveguide band and return loss greater than 15 dB. These products are used for instrumentation, multipolarization radars, sensors, radiometers and communication systems.

### Specifications

PERFORMANCE PARAMETER	TYPICAL CHARACTERISTICS
Frequency Range	18 to 110 GHz
Operating Bandwidth	Full Waveguide Band
Insertion Loss	0.5 dB typical
Isolation Between Polarization	32 dB minimum
VSWR	1.4:1 max. over the band

### Ordering Information

