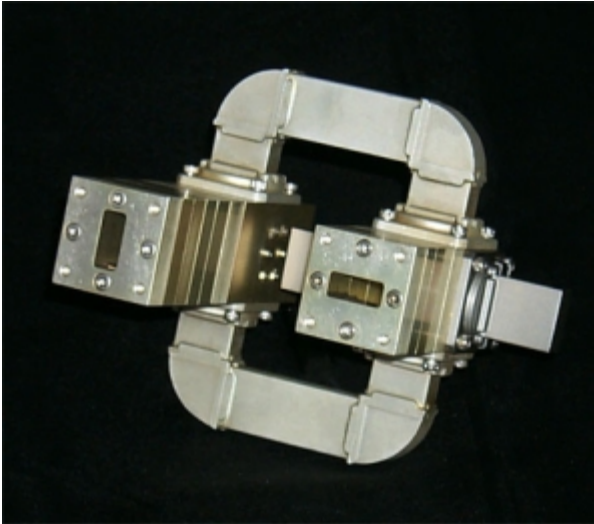


FULL WAVEGUIDE BANDWIDTH ORTHOMODE COUPLERS



8.0 – 12.4 GHZ ORTHOMODE REAR



8.0 – 12.4 GHZ ORTHOMODE FRONT

These orthomode couplers are used with horn antennas or with feeds for reflector antennas to produce two orthogonal polarizations in the same antenna. The VSWR is less than 1.35 over the full waveguide bandwidth. The measured VSWR of the 8.0-12.4 GHz model is shown below. The isolation is greater than 40 dB over the full waveguide band, and greater than 50 dB over most of the band. Orthomode couplers have been built and tested by Microstar for 5.8-8.2 GHz (WR137), 8.0-12.4 GHz (WR90), and 12-18 GHz (WR62); and the design is scalable to other waveguide sizes.

