





# RF Feed Designs

# Technologically Advanced RF Solutions

mWAVE's Custom and Commercial products include Specialized Satcom feeds that operate in the L-Band, S-Band, C-Band, Ku & Ka-Band, X-Band, and W-Bands. Conscanning or Monopulse feed designs for signal tracking, calibration source and targeting antenna integration, and system integration are standard for mWAVE's engineering team. mWAVE feed and antenna designs employ the latest simulation and design software to efficiently engineer high-performing feeds and antennas. mWAVE's other product offerings consist of micro-strip arrays, horn, helical, sector, directional parabolic, omni-directional, and high-performance waveguide arrays. mWAVE maintains well equipped outdoor and indoor antenna test ranges for antenna / feed design and production verification.

## Market Segments

- Telemetry
- Troposcatter
- · Satellite
- Radar
- Line of site (LOS)
- Scientific
- Exploratory
- Testing
- Research
- SNG
- Defense

# **Custom Feed Designs**

- Adjustment / Switching
- · Cassegrain / Gregorian
- Conscanning
- Conical Feed Horns
- High Power
- Mono-pulse
- Multi-Band
- Offset Feeds
- Remote Polarization
- Remote Switching
- Scalar Feeds
- Shaped Beam
- Troposcatter
- Various Polarization





Form: mWAVE Feeds Brochure\_rev.0-DS-220316





### Prime Focus Feeds

- Frequency Bands from 0.9 to 60 GHz
- · Letter Bands from VHF to V Band
- Quad Ridged Dual Pol.
- Dual Ridged Single Pol.
- Dual Circular Pol.
- Dual Linear Pol.
- Single Circular Polarized
- Single Linear Polarized
- Conical Feed Horns
- Custom Configurations

### All Metal Waveguide Feeds

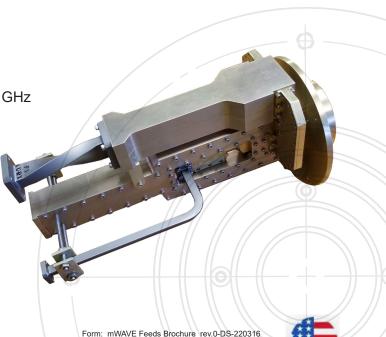
- Full Waveguide Bands
- Frequency Bands from 1.7 to 60 GHz
- Letter Bands from L to V
- Waveguide Sizes WR-430 to WR-19
- Single, Dual Linear and Circular
- Conical Feed Horns
- All Metal Waveguide
- No Lossy Dielectrics
- Waveguide or Coax Inputs
- Custom Configurations

#### Multi-Band / Multi-Port Feeds

- Frequency Bands from 300 MHz to 60 GHz
- Letter Bands from UHF to W
- 2 Ports to 6 Ports
- Single and Dual Circular
- Single and Dual Linear
- Conical Feed Horns
- All Metal Waveguide
- No Lossy Dielectrics
- Waveguide or Coax Inputs
- Custom Configurations











#### **Letter Bands**

**UHF** 

**VHF** 

L Band

L/S Bands

L/S/C Bands

S Band

C Band

X Band

Ku Band

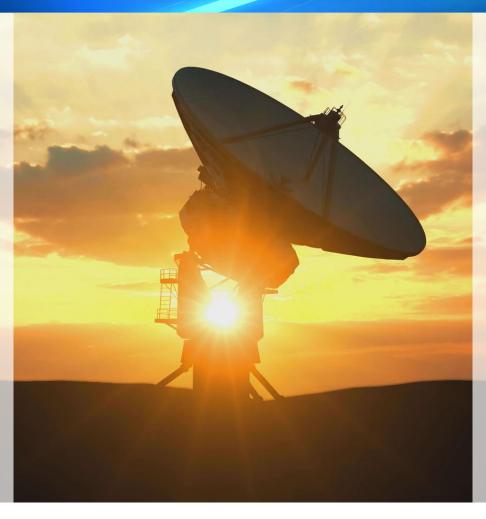
K Band

Ka Band

V Band

W Band

MMW Band



### **Frequency Bands**

030 - 300 MHz

300 - 1000 MHz

 $1.0 - 2.0 \, \text{GHz}$ 

1.0 - 8.0 GHz

1.0 - 8.0 GHz

2.0 - 4.0 GHz

4.0 - 8.0 GHZ

8.0 - 12.0 GHz

12.0 - 18.0 GHz

18.0 - 27.0 GHz

27.0 - 40.0 GHz

40.0 - 75.0 GHz

75 - 110 GHz

110 - 300 GHz

#### About

mWave Industries is a member of the Alaris Holdings Group of companies and is a leading global provider of innovative custom and commercial microwave feed and antenna solutions with products ranging from 100-MHz to 110-GHz. Our microwave feeds and antenna products are integrated into a wide array of applications by the government, military, scientific community, wireless carriers, utilities, public safety, and satellite industry. Our terrestrial microwave antennas and feeds are recognized worldwide for being technologically advanced, inherently robust designs and their reliability.

#### mWAVE antennas are engineered and built in the USA

Visit our website www.mwavellc.com or contact us at +1.207.892.0011 for more information.

A member of the Alaris Holdings Group













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This brochure is for planning purposes and is only intended for this product lines capability and design potential. mWAVE, Gabriel and Mark product lines are committed to the highest quality standards and environmental sustainability materials.

Additional information about mWAVE and our commitment can be found at https://www.mwavellc.com/mwave-industries-llc-about-us/sustainability.

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