# П Mtron ™

Crystals, Oscillators, Filters and RF Solutions



Satellite Communications



## Mission Proven Crystals, Oscillators, Filters and RF Solutions for

# **Over 60 Years**

Mtron is a proven market leader for highly selective filter products and tight stability, low phase noise and low g-sensitivity crystals and oscillators. As a fully integrated design and manufacturing organization, Mtron has an established team and track record to meet ground, shipboard and airborne satellite communications component and subsystem requirments.



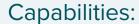
## Partners:

- Northrop Grumman Corporation
- Hughes Network Systems LLC
- · Honeywell International Inc.
- L3Harris Technologies Inc.
- Gilat Satellite Networks
- Cubic Corporation
- AvL Technologies
- Thales Group
- Viasat



## Our Satellite Communications Advantage

Supporting military and commercial satellite communication applications, Mtron offers standard and custom products that meet size, weight, performance, and reliability requirements.



- Ultra-lightweight and compact RF Solutions
- · High power handling RF filters
- · Corona discharge analysis / testing
- · High channel to channel isolation
- Very low insertion loss
- · Ultra-low phase noise and tight stability in a small package
- e-Vibe™ compensation oscillator capability, low G-sensitivity

## **Product Lines:**

- Tight stability, low phase noise and low G-sensitivity OCXOs up to 4 GHz
- PLL integrated oscillators
- · LC filters to 6 GHz
- Cavity / Waveguide filters to 30 GHz
- Planar Filter from 1.5 GHz to 20 GHz
- N-plexers, switched filter banks
- Low G-sensitivity TCXO
- Low phase noise VCXO
- Tunable Filters
- LNAs
- SSPAs
- **RF Solutions**











## **Satellite Communications**

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Our expert team of Engineers, Program Managers, Assemblers and Testers know the demands of Satellite Communications applications and the discipline required to deliver high performance and highly reliable products.

### In House Testing

- Fine Leak Testing Helium per MIL-STD-202, Method 112
- Gross Leak Testing per MIL-STD-202, Method 112
- Random Vibration per MIL-STD-202, Method 214A
- Sinusoidal Vibration per MIL-STD-202, Method 201 and 204
- Mechanical Shock per MIL-STD-202, Method 213
- Thermal Shock per MIL-STD-202, Method 107
- Terminal Strength per MIL-STD-202, Method 211
- PIND (Particle Impact Noise Detection) per MIL-STD-202, Method 217
- Other Miscellaneous Testing including: Life, Immersion, Humidity, Barometric Pressure and Solderability
- Dielectric Withstanding Voltage and Insulation Resistance
- Corona Discharge Analysis/Testing

### **Production Capabilities**

- Phase and Amplitude Matched Filter Sets
- Automated Intermodulation Testing
- Lead Attached 5x7mm package
- In house Crystal Processing
- World-class FOD Control
- Laser Weld

## Workmanship Standards

- In-house J-STD-001 Certified Trainer
- J-STD-001 Class 2 and 3

### Full DC and RF Testing

- RF Testing 100 kHz to 40 GHz
- In-house Power Testing
- Corona Discharge Analysis/Testing

