The Specialists from DC-mmW

VIEW AS WEBPAGE

JULY 2022 NEWSLETTER

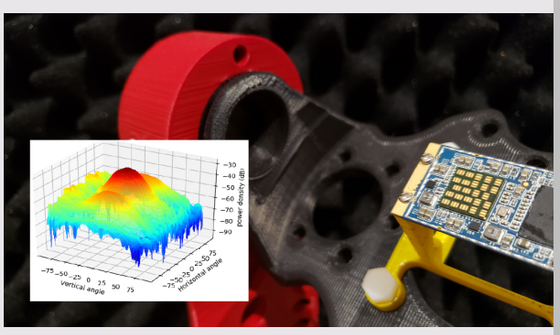
- **MilliBox** - Melcom Introduce MilliBox a Modular & Cost effective Anechoic Chambers
- **Southwest Microwave** - New SSBB Miniature Multi-Pin Board-to-Board Connector
- **Copper Mountain Technologies** - New Multi-Port VNAs and New S5180B 18 GHz Pulse capability
- **Eravant** - Proxi-Flange - Contactless Flange Waveguide and Wave-Glide Rail System for more efficient mmW Tests
- **Misotech** - Filters
- **Noisecom -** Introducing Programmable Noise Generators

Introducing MilliBox
mmWave Anechoic Chamber and Positioner System

MilliBox mmWave Antenna Test System consists of a mmWave Anechoic Chamber and 3D Antenna Positioner product line.

MilliBox mmWave Antenna Test System provides the following benefits:

- Compact and for individual usage, therefore always available when you need it
- Cost competitive even against DIY setups
- Modular, it evolves with your needs
- Flexible and expandable software platform



mmWave Anechoic Chambers

- MilliBox is constructed out of modular cubes which are combined to achieve the far field distance required
- All MilliBox chambers are equipped with an instrument bay below the chamber deck, such that instruments like Spectrum Analyser and VNA are placed close to the device under test

mmWave 3D Antenna Positioners

- MilliBox chambers are equipped with 3D antenna positioners Gimbals.
- The positioners are made of plastic material therefore reducing stray mmWave reflection
- Positioner control interface is USB software controller via Python source code. As a result, the user can modify and augment the software capabilities easily
- The controller can run on any platform

Click below for Product Guide

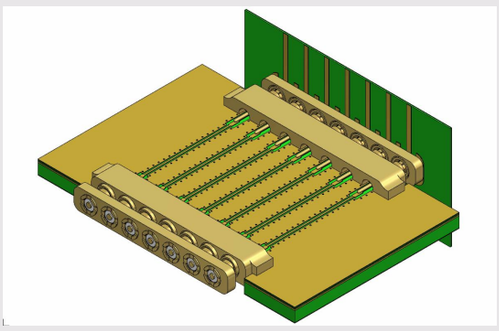
Click below for video on MilliBox

Learn more about MilliBox

Contact Melcom - for detailed specification, pricing & availability

SOUTHWEST MICROWAVE

New SSBB Multi-Pin Board-to-Board Connector up to 67 GHz



- Freely configurable to meet PCB requirements
- Available in surface or edge mount configurations for parallel and perpendicular board mating
- Allows multiple high density connections
- Lowest-in- the-industry mating and de-mating forces
- Supports the engineering need for miniaturisation without sacrificing performance
- Designed for Aerospace Space and Hi REL Applications

Read more

Learn more about Southwest Microwave

Contact Melcom - for detailed specification, pricing & availability

COPPER MOUNTAIN TECHNOLOGIES

New Multiport VNAs available in 6,8,10,12,14 and 16 port configurations and New S5180B VNA

- Frequency range: 300 kHz - 9 GHz
- Wide output power range: -45 dBm to +10 dBm
- Dynamic range: 140 dB typ (10 Hz IFBW)
- Measurement time per point: 24 µs per point, min typ.
- Time domain and gating conversion included
- Frequency offset mode, including vector mixer calibration measurements
- Up to 500,001 measurement points
- Precision calibration methods and automatic calibration

Click here for full product range

New S5180B VNA
(2-Port 18 GHz Analyser)

- Pulse measurement capability
- Frequency range: 100 kHz to 18 GHz
- Measured parameters: S11,S21, S12, S22
- Sweep types: Linear frequency, log frequency, segment, power sweep
- Dynamic range: 130 dB typ (10- Hz IF BW)
- Measurement speed: 24µ typ
- Output power adjustment range: -45 dBm to + 10 dBm
- Measurement points per sweep: up to 200,001

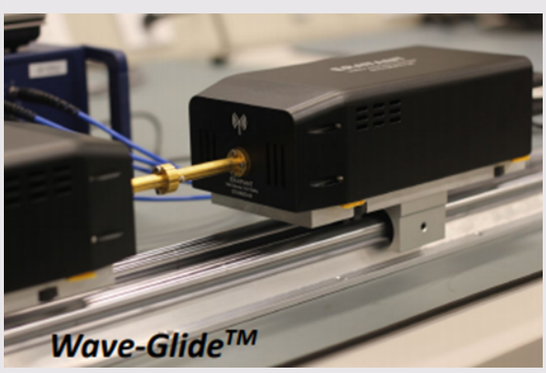
Datasheet

Learn more about Copper Mountain

Contact Melcom - for detailed specification, pricing & availability

ERAVANT
FORMERLY SAGE MILLIMETER

Wave-Glide™ Rail System



- Assures easy and fast precision alignment of frequency extender heads for mmW test
- Reduces set up time, increases repeatability
- Optimises performance by eliminating mis-alignment conditions
- Especially effective when used with the Proxi-Flange™ range

Click here for full range of Wave-Glide products provided

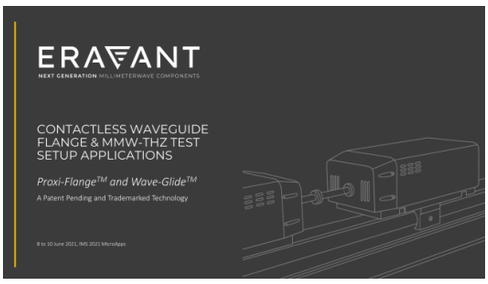
Proxi-Flange™ Contactless Flange

- To enhance the mmW VNA test system, Eravant has introduced a contactless

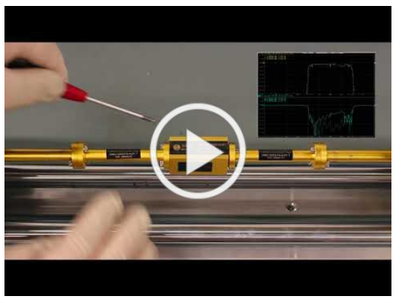
flange design
- Contactless Flange is a waveguide section with a novel flange design which forms the RF choke to eliminate the need of perfect mechanical connection
- Offered in 6 waveguide bands covering the frequency range of 50 to 220 GHz
- Reduces mmW setup time and increases test repeatability

Click here for full range of Proxi-Flange products provided

Click on the Proxi-Flange and WaveGlide Presentation



Click below for the video on Proxi-Flange and Wave-Glide



Learn more about Eravant

Contact Melcom - for detailed specification, pricing & availability

Smile with you
MISOTECH

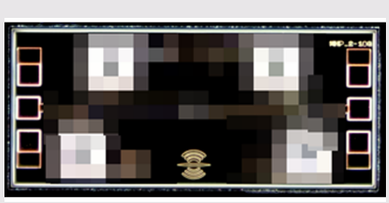
Melcom Now Supply A Range Of Misotech Filters

Cavity Filters
Military, Defence & Commercial Applications

- Low loss
- Very high selectivity
- Wide range of bandwidth -0.5% to 70%
- High peak power
- Excellent temperature stability
- Low IMD designs available
- Compliant L Typical performance
- Qualified to MIL standards

Click here for full range of Cavity Filters provided

MMIC Filters
Military, Defence & Commercial Applications



- GaAs PD25-00, 100um
- High frequency up to 50 GHz
- Standard MMICs of defence
- Customised MMICs
- RoHs compliant
- Storage Temperature: -65±150 °C
- Operating Temperature: -55±125 °C
- Power Range: +30 dBM max
- Qualified to MIL standards

Click here for full range of MMIC Filters provided

MEMS Filters
Military, Defence & Commercial Applications

- Precision MEMS process
- High frequency up to 50 GHz
- Silicon substrate
- Au Wire bondin, QFN Package
- RoHs Compliant
- Storage Temperature: -55_+125 °C
- Operating Temperature: -55_+85 °C
- Power Range: +35 dBM Max
- Qualified to MIL standards

Click here for full range of MEMS Filters provided

Ceramic Filters
Military, Defence & Commercial Applications

- High Q Factor
- Low Insertion Loss
- Wide Frequency range (200 MHz to 6
- GHz)
- High Frequency and Mechanical
- stability
- Notch Filters available
- Surface mount and thru-hole mount
- 50 Ohm standard, 75 Ohm impedance
- available
- Custom designs available
- Available in tape and reel packing
- Sealed packages available
- Temperature Range: -55 to 85 °C
- Temperature Stability: (±5 ppm/°C)
- Compliant to MIL & RoHs Specs

Click here for full range of Ceramic Filters provided

LC Lumped Filters
Military, Defence & Commercial Applications

- Small size, low profile
- Leaded, surface mount, PC mount and connectorised
- Hermetically seated package available
- Wide range of transfer functions
- 30 kHz to 20 GHz
- Temperature Range: -55 to 85 °C
- Temperature Stability: (± 5 ppm/°C)
- Compliant to MIL & RoHs Specs

Click here for full range of Lumped Filters provided

Waveguide Filters
Military, Defence & Commercial Applications

- 0.1 to 20% bandwidth
- Extremely low loss
- High Power handling
- High power capacity
- Compliant to MIL & RoHs Specs

Click here for full range of Waveguide Filters provided

Learn more about Misotech

Contact Melcom - for detailed specification, pricing & availability

Noisecom

Introducing Programmable Noise Generators

UFX7000B Broadband AWGN Noise Generator

- Output White Gaussian noise
- Output power up to +30 dBm
- 127 dB of attenuation; 0.1 dB step size
- Units > 2 GHz have total attenuation of 79.9 dB
- Low distortion signal path
- Power 115 VAC, 60 Hz
- Noise attenuator accuracy: ±0.2 dB or 0.5% at 1 – 500 MHz ±0.2 dB or 1% at 0.5 – 1.0 GHz ±0.3 dB or 2% at 1 – 2 GHz
- Standard connectors SMA female
- 7" touch screen display
- Dimensions: 17.25 in. wide x 6.50 in. including feet, high x 19.50 in. deep
- Removable hard drive for added security
- Operating Temperature: -10° to +65°C

Datasheet

RFX7000 Broadband AWGN Noise Generator

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- Noise attenuator accuracy:
  - ±0.2 dB or 0.5% at 1 – 500 MHz
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  - ±0.3 dB or 2% at 1 – 2 GHz
- Standard connectors SMA female
- Power 115 VAC, 60 Hz; 110 VAC, 220 VAC
- Operating Temperature: -10° to +65°C

Datasheet

Learn more about Noisecom

Contact Melcom - for detailed specification, pricing & availability

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