



**5G CHAMBER 18GHz-75GHz
PASSIVE / ACTIVE**

October 2019 v2



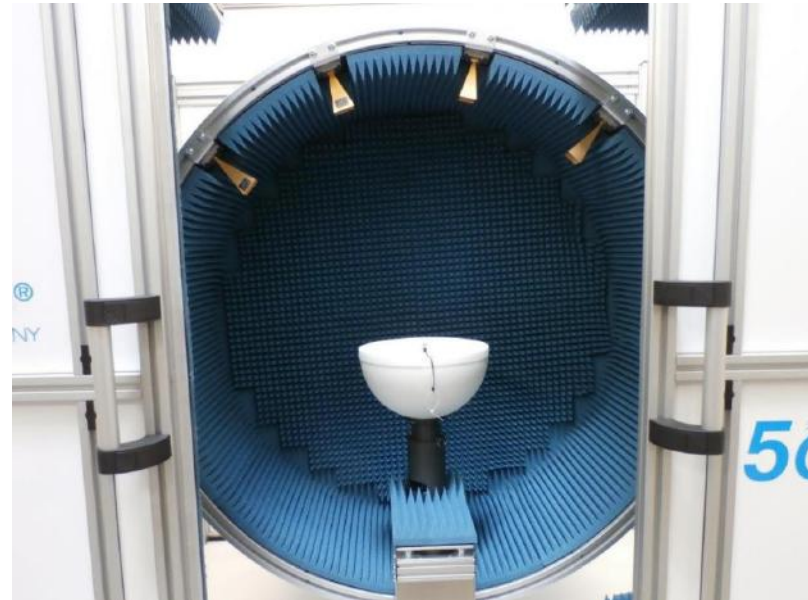
5G CHAMBER | OVERVIEW

The Ethertronics® **ETH-MMW-1000** is a fully anechoic millimeter measurement system capable of testing wireless devices from 18 to 75GHz. The system is self-contained, moveable, and compact enough to fit into any laboratory or production environment.

The Chamber dimensions are: 2.38m (93.7in) x 1.70m (67in) x 1.24m (48.8in).

Measurement Capabilities (Passive & Active)

- Gain
- Directivity
- Efficiency
- Beam Width
- Cross Polar Discrimination
- Side Lobe Levels
- 3D Radiation Pattern
- Radiation Pattern in any Polarization
- TRP, TIS, EIRP & EIS
- Max DUT dimensions: 45 cm.
- Max DUT weight: 10 Kg.
- Total equipment weight: 430 Kg without VNA.
- Positioners 0-180deg and 0-360deg, accuracy 0.01deg.
- Chamber Frame: Aluminium



5G CHAMBER | BENEFITS (1/2)

- **Compact, Low Noise, 5G** Anechoic Chamber from **18 to 75GHz**, 0.01deg step rotational mast.
- 2 Horns per frequency band (VP, HP), Maximum 12 Horns per Chamber.
 - Up to 6 sets of probes for the same frequency band to reduce measurement time
 - Or 3 bands (2 Horns each)
- **Passive and Active** measurements enabled.
- **No up/down conversion** for measurements. Measurements are done at the frequency from the source.
- **Main chamber construction based on waveguides (not cables)**
 - No noise generation during active measurements (TIS level more stable)
 - No need for power amplifier for active measurements
 - Low RF path losses due to optimized amount of cables
- **100% phase integrity from Source**
 - No phase errors added due to conversion

5G CHAMBER | BENEFITS (2/2)

- **Quiet Zone +/- 150mm (+/- 6in)**
- **No reflection interferences** due to hemispherical shape range
- **Built-In Slip Ring for all digital cables (6 to 18pcs)** to monitor and power DUT
- 5G Far Field chamber
 - No additional post processing computing time
 - No phase information loss as in Near Field chambers
 - Can be custom designed for bigger Quiet zone needs.
- **1 week max** for chamber Installation & Training
 - Easy to move Around, through door opening
 - Easy to install
 - Delivery lead-time 16 weeks
- Measurement Equipment Agnostic (VNA, Emulator, Spectrum Analyzer) using preferably Anritsu, Keysight, R&S.
- Most User Friendly Post Processing Software / Easy Reporting using saving features to clipboard

5G CHAMBER | TESTING SERVICES (1/2)

- **Passive Testing: \$5,000 USD / Day (8 hours)**
 - Includes 1 technician performing the measurements
 - Includes access to lab (welder, VNA),
 - Isolated room for confidentiality
 - Includes Technical Report of all performed measurements
- **Discount applies** based on number of testing hours per region: 10% off daily fee after 40hrs recorded measurement.
- **Select your region** for measurement session based on availability
 - Nice, France
 - Suwon, South Korea
 - San Diego, CA, USA

5G CHAMBER | TESTING SERVICES (2/2)

- **PASSIVE MEASUREMENTS**

- VNA available on site

- **ACTIVE MEASUREMENTS**

- NON 5G SIGNALLING ACTIVE TESTING

- Spectrum Analyzer and CW testing possible for power radiation patterns

- 5G SIGNALLING ACTIVE TESTING

- Based upon Emulator availability in the region (Pricing varies based on availability)

- Bring your own Emulator

- You can ship your Emulator to the Ethertronics facility to perform 5G measurements

- Customer is responsible for equipment packaging opening, repackaging and logistics

- **RENT YOUR OWN 5G CHAMBER for 4 WEEKS**

- Pricing \$150,000 USD w/o VAT

- Includes logistics freight , customs

- Includes 2 day Installation, Training & Setup and Teardown

THANK YOU

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