

# 220 GHz Broadband Solution

## Single-sweep Solution with Over-Temperature and Auto RF Capability

FormFactor, in collaboration with Keysight Technologies, Virginia Diodes, and Dominion Microprobes, introduces a new 220 GHz single-sweep broadband solution for high-accuracy on-wafer measurements.

The system provides the best dynamic range, highest leveled output power, and greatest stability for efficient broadband device modeling and characterization of on-wafer devices for next-generation 5G and future 6G technologies.

The single-sweep solution is based on Keysight's industry-leading N5291A millimeter-wave system, coupled with specially designed sub-THz frequency extenders from Virginia Diodes. This allows users to leverage their existing N5291A systems to support a single sweep to 170 GHz or 220 GHz.

Newly developed T-wave probes allow continuous broadband sweeps up to 220 GHz with lowest insertion loss.



#### **Measurements Over Temperature**

Optional RF TopHat: EMI-shielded, dark and frost-free

220 GHz

900 Hz

### **Single-sweep Solution**

Continuous swept measurements up to 220 GHz



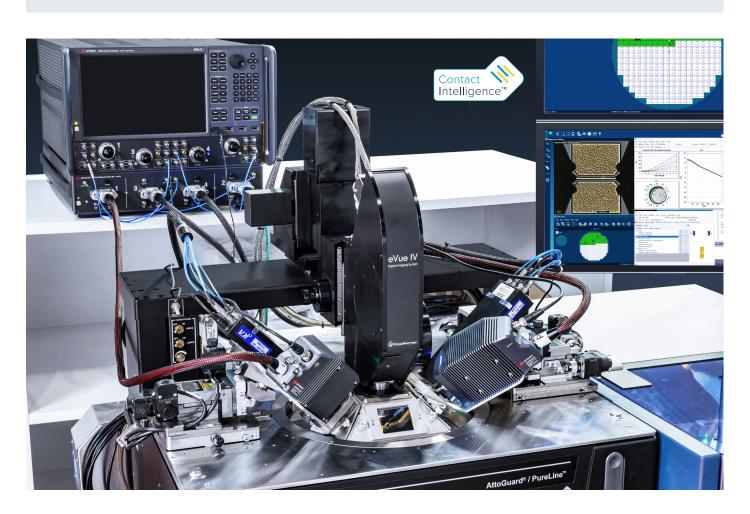
## **Autonomous RF Capability**

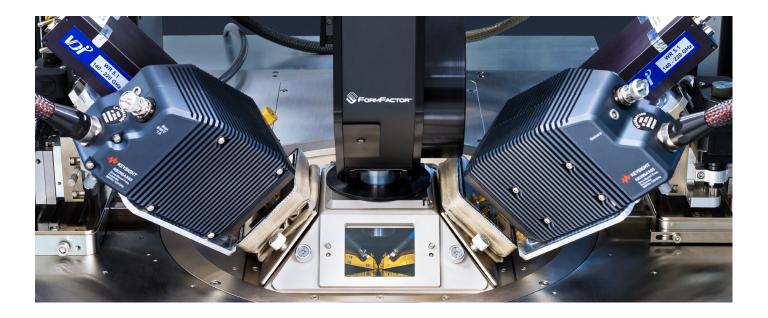
Continuous calibration monitor and re-calibration for highest measurement certainty



## Efficiently Characterize 5G and 6G Devices

Highest leveled output power and best dynamic range





## **Over-Temperature Capability**

Equipped with FormFactor's patented RF TopHat, the solution has full thermal range, EMI-shielded, and dark measurement capabilities. The RF TopHat isolates the sensitive extenders from the hot chuck, ensuring the highest measurement stability and maximizing their lifetime.





The I.T.O. coated window provides easy setup of probes, EMIshielded and frost-free measurements. For dark measurements a cover can be added.

### **Autonomous RF**

The system is fully compatible with FormFactor's exclusive Autonomous RF Measurement Assistant\* which, together with WinCAL XE, provides continuous calibration monitor and re-calibration for true unattended 24/7 testing and reduced measurement uncertainty.



## **Modular Solution**

FormFactor's modular RF probe arms can be conveniently swapped with other probe arms for RF, millimeter-wave, Terahertz and Load-pull applications. Positioner bodies can be motorized or manual.











Swap different applications easily! All modular RF probe arms fit with our manual and motorized positioners (RPP404 and RPP504). Fully populated probe arms can be conveniently stored in FormFactor's Storage Pods.

## **Station Compatibility**

The system can be hosted on the following FormFactor probe stations:

- SUMMIT200
- EPS200MMW
- Summit 12000 and 11000
- · CM300
- Elite300



<sup>\*</sup> Autonomous RF is available on SUMMIT200, Summit 12000, CM300xi and Elite300