

MPI TS150-THZ | 150 mm Manual Probe System **Pioneering Turn-Key Solution for Automated On-Wafer mmW Antenna Characterization**

The industry-first automated system for wafer-level antenna characterization at mmW frequency range and beyond for 5G and automotive applications

Programmable Robot for Automated Antenna Scanning

- Industrial grade 6-axis robot
- Fully programmable scanning distance and angles
- Spherical scan in horizontal and vertical polarization
- Can be moved to parking position for 2/4-port measurements

R&S ZVA Vector Network Analyzer

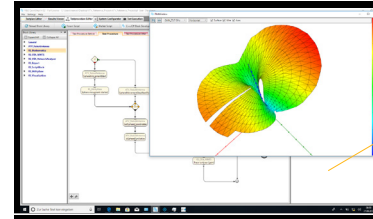
- ZVA24/40/50 or 67 for V- and W-band configurations, other bands on request
- ZVA110 (10 MHz to 110 GHz)

R&S Compact and Light Receiver Module

- Mini Receiver module for V or W band, other bands on request
- Optimized for far-field operation
- Laser crosshair for DUT centering

Special TITAN™ 110 GHz RF Probes Made by EM-Passive Material for Minimizing Signal Interference

- 50 Ohm impedance
- Handling up to 5W RF power
- Low insertion loss (< 1.2dB)



Industry Leading R&S® QuickStep® Test Executive Software for Flexible Antenna Characterization

- Seamless robot integration by ATV Systems
- Flow chart programming of measurement tasks
- Full graphical visualization of antenna pattern

MZ12 Microscope on a Dedicated Transport for Clear Scanning Area

- Allows accurate probe positioning with 1.6 µm optical resolution
- 250 mm X manual slider with interlock to prevent robot collision (scanning is allowed only in side scope position)
- 50 x 50 mm linear XY fine movement, 140 mm pneumatic lift

R&S Frequency Converter (Extender)

- V and W band modules ZVA-Z75/110 (E), ZC78/110, up to +14 dBm output power (ZC110)
- Other frequency bands on request
- Continuous 10 MHz to 110 GHz operation (ZVA110)

TS150-THZ is Industry-Renowned System for Wafer-Level Measurements at mmW and THz Frequency Ranges

- Single large probe platen in rigid design
- 4 probe platen supports for max. stability
- Unique puck controlled air bearing stage for quick single-handed operation and micrometer fine XY adjustment
- 180 x 300 mm XY total stage movement, Resolution < 1.0 µm (0.04 mils) @ 500 µm/rev
- 10 mm fine Z, resolution < 1.0 µm (0.04 mils) @ 500 µm/rev, with digital indicator



*****Available Options*****

- Ambient chuck made by EM-passive material
- Adaptions for various frequency extenders
- Light curtain safety enclosure
- Table with antivibration platform
- Instrument Rack
- Single IC thermal chuck

R&S®ZVA and R&S®QuickStep® Test Executive Software are trademarks of Rohde & Schwarz