



With our experience in designing and measuring radomes, we can support you at every stage of the entire product development process: from the concept phase to series production.

Make our automotive radar experience since 2009 work for you and get in touch with us!

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MADE IN GERMANY



Radome Measurement Systems

Solutions for Radome and Material Measurement
from R&D to Production

RMS-D-77|79G / RMS-DXY-77|79G

- ▲ Testing of radar covers & characterization of materials
- ▲ Measurement of
 - ▲ **permittivity and loss tangent**
 - ▲ **transmission** in amplitude and phase
 - ▲ **reflection** (optional)
- ▲ **Future proof:** Both automotive radar bands (77|79G)
- ▲ **Easy to handle:** Measurement with a single button press
- ▲ **Small-size** sample measurement
- ▲ **Real-time measurement:** Enabled by fast update time
- ▲ **Highest accuracy in market:** Better than 0.1 dB | 1 deg for transmission
- ▲ **Comparability** with measurements using VNA (Vector Network Analyzer) and RMS-C
- ▲ **Scanning measurements** with RMS-DXY positioning system
- ▲ **Data Analyzer GUI** for offline measurement data analysis and layer stack simulation (optional)
- ▲ **On-site Calibration:** Reduces downtime and keeps equipment in peak condition with minimal disruption
- ▲ **Cost effective solution** compared to VNA systems
- ▲ **Proven technology:** Used worldwide by leading paint, pigment and polymer manufacturers, exterior part suppliers, sensor producers and OEMs since 2019



RMS-DXY including scanning options



RMS-C-77|79G

- ▲ Production testing of radar covers
- ▲ Measurement of
 - ▲ **transmission** in amplitude and phase
 - ▲ **reflection** (optional)
- ▲ **Future proof:** Both automotive radar bands (77|79G)
- ▲ **Robust design:** 24/7 high-precision testing with housing milled from a single block of aluminum
- ▲ **Short measurement time** allows test within a few seconds
- ▲ **Flexible pointwise measurement:** Allows to follow the shape of the part in a robot-based setup (e.g. to measure vertical in every point of a bumper)
- ▲ **Configurable setup:** Available with different arm lengths and vertical or horizontal polarization (optional)
- ▲ **Flexible integration** in production: Prepared for robot-based process; remote control by Ethernet and powered with 24 VDC
- ▲ **Highest accuracy in market:** Better than 0.1 dB | 1 deg for transmission and transparent measurement procedure
- ▲ **Comparability** with measurements using VNA (Vector Network Analyzer) and RMS-D
- ▲ **On-site Calibration:** Reduces downtime and keeps equipment in peak condition with minimal disruption
- ▲ **Proven technology:** Used worldwide in >200 installations for leading automotive OEMs since 2020



RMS-C including arm extension option



Automotive radar cover testing Material characterization (pigments, plastics, coatings, ...)	Application	Automotive radar cover testing
Research & development	Application field	Production in-line and end-of-line
76 to 81 GHz	Frequency range	76 to 81 GHz
<ul style="list-style-type: none"> ● Material permittivity and loss tangent (RMS-D) ● Transmission amplitude and phase (RMS-D) ○ Reflection single-point (RMS-D) ● Transmission imaging (RMS-DXY) ○ Reflection imaging (RMS-DXY) 	Measured parameters	<ul style="list-style-type: none"> ● Transmission amplitude and phase ○ Reflection
±0.1 dB / ±1 deg	Transmission measurement accuracy	±0.1 dB / ±1 deg
> 40 dB	Transmission dynamic range	> 40 dB
85 ~ 264 VAC, 47 ~ 63 Hz	Power supply	24 VDC
45	Weight in kg	23
420 x 530 x 815 (W x L x H)	Dimensions in mm	380 x 440 x 500-650 (W x L x H)
30 mm aperture (RMS-D), reflection imaging (RMS-DXY), offline GUI, horizontal polarization	Options	100 mm arm extension, 150 mm arm extension, reflection measurement, horizontal polarization
✓	Material characterization	-
✓	Radome design & simulation	-
✓	Radome evaluation	✓

● yes ○ optional