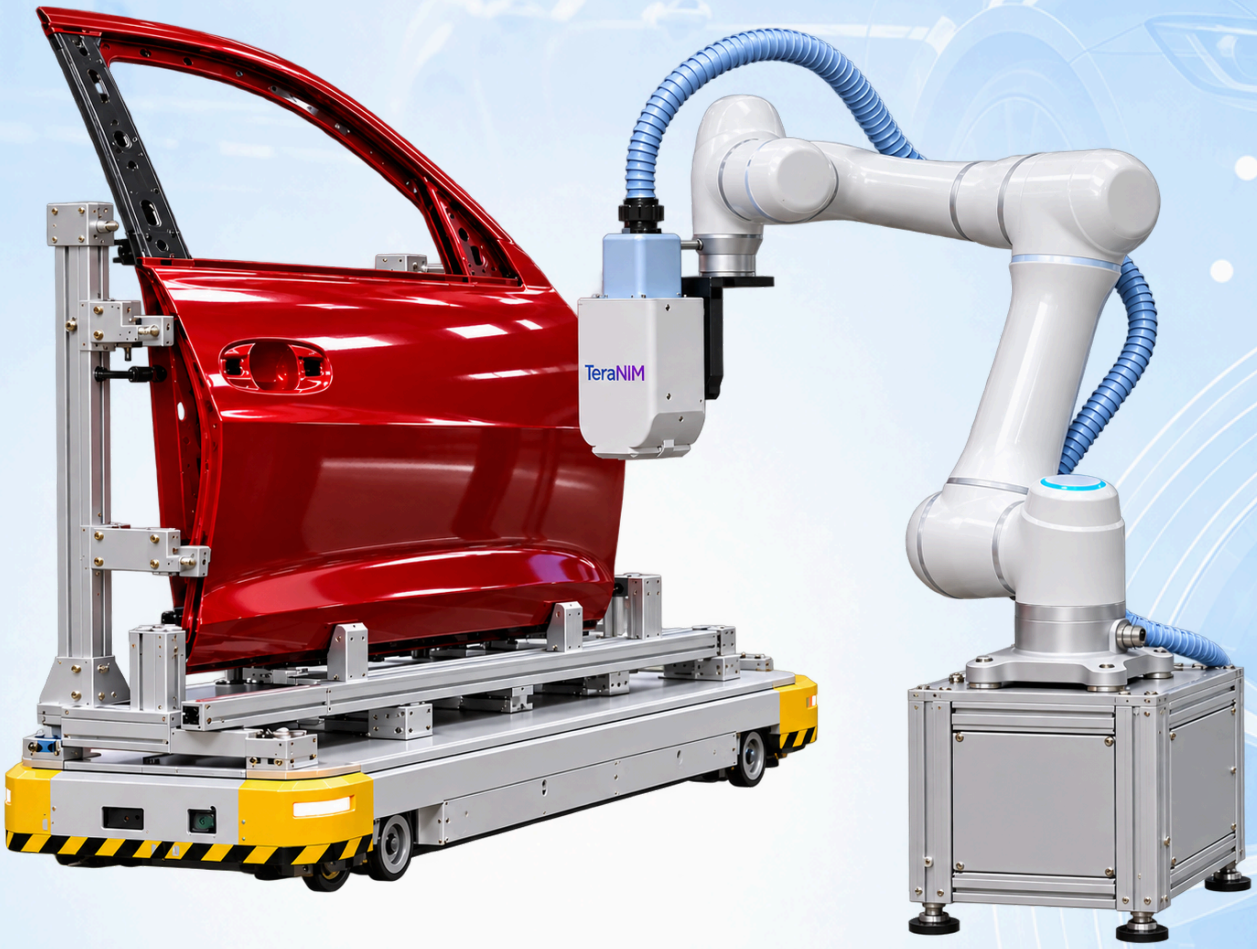
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AUTOMOTIVE
HIGHER QUALITY
HIGHER PRODUCTIVITY
SMARTER MANUFACTURING

TeraNIM - Auto

Multi-Layer DFT Station



Why Paint Coating Inspection Matters

- Long-Term Durability and Brand Reputation
- Cost Reduction & Waste Prevention
- DIN 50996: 2020-05 compliant
- Digitalization and Industry 4.0

Applications

For Automotive Paint Shop Quality Control



Body Panels



Doors



Fenders



Bonnets / Hoods



Plastic Bumper

- Non-Contact
- Fully Automated
- High Precision
- Real-time Results

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How Terahertz Technology Works

THz pulses reflect from each coating-layer interface. Time separation between reflections provides information about the optical time paths of individual paint layers.

1 SCAN

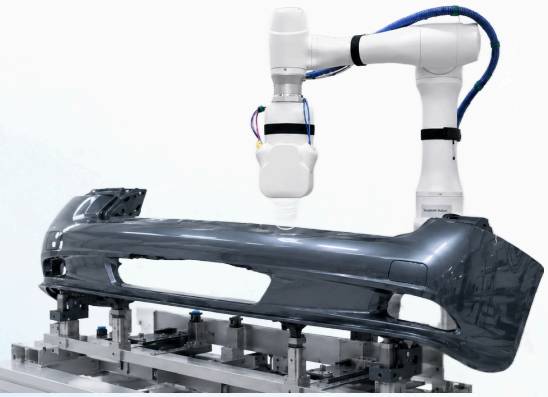
Single-sided, non-contact THz measurement at defined locations.

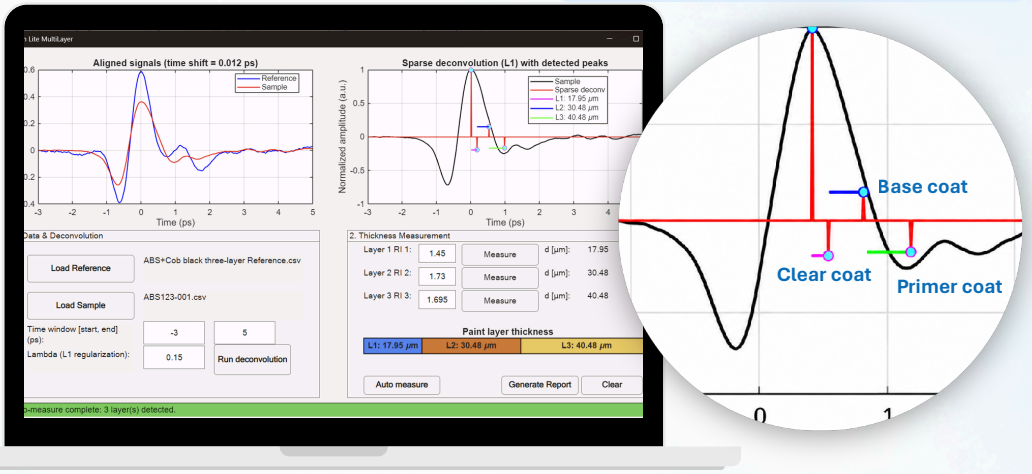
2 DETECT

Identify reflections from clear coat, base coat, primer, E-coat and substrate interfaces.

3 ANALYZE & REPORT

Measure individual layer thickness and total DFT, compare with tolerance limits, and provide Pass/Fail results.





Key features

Paintshop Coating Combinations THz	
Compatible Substrates	Metallic: Ferrous and non-ferrous Non-Metallic: Plastics (Nylon, ABS, Thermoplastic) & Composites
Coating Types	Solid colors, clear coat, base coat, and scratch-resistant coating
Part Geometry	Plane, curved surfaces
Coating Condition	Dry and fully cured coatings
Measurement Result	Individual coating layers and total thickness

THz Measurement Compatibility	
Minimum Thickness	20 µm
Number of Layers	Up to 4 coating layers
Measurement Spot	~ 2 mm
Measurement Time	Approx. 5–10 s per point
Working Distance	25–100 mm
Orientation	90 degrees
Thickness Accuracy	±1 µm
Reports	PDF and Excel Formats

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