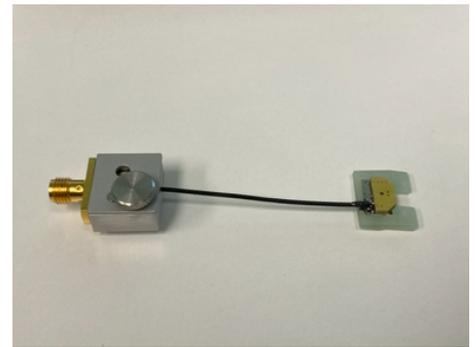


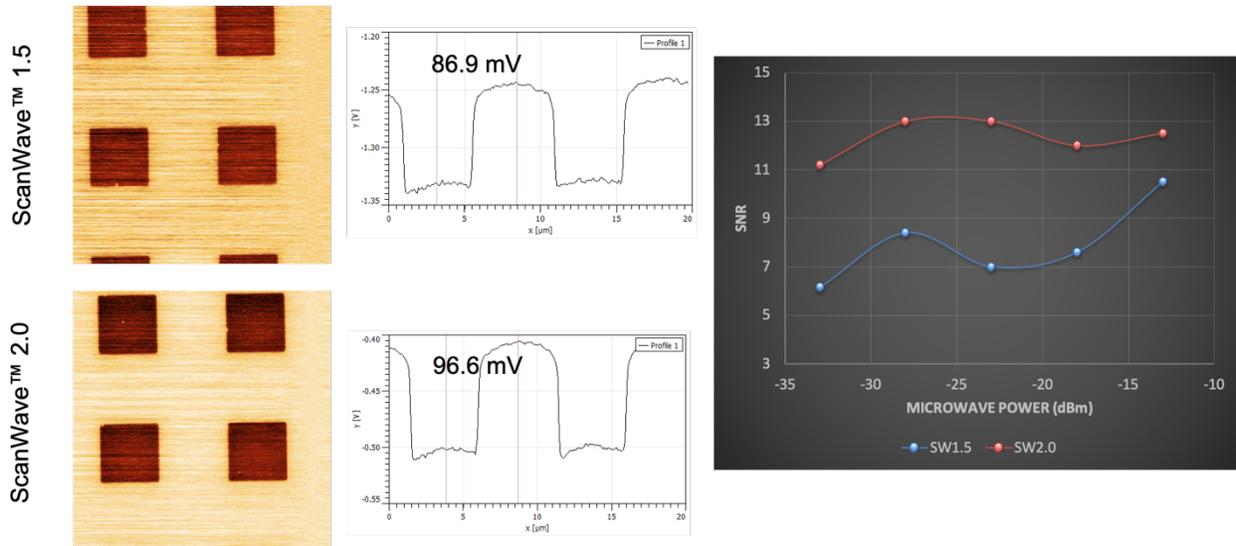
PrimeNano ScanWave™ 2.0

Key Features

- Improved Signal to Noise (20-30%)
- Tool-less probe holder mounting
- Improved probe holder and probe tolerances
- Improved drift stability of electronics
- Replaces ScanWave™ 1.5
- Ideal for measurement of:
 - Permittivity and conductivity
 - Dielectrics, insulators conductors, semiconductors
 - Can measure linear and non-linear materials simultaneously
 - Sub-surface structures
 - No electrical backside contact needed
- Linear response with permittivity
- Linear response with dopant concentration
- Compatible with any SPM imaging mode (Contact, non-contact, intermittent contact)



ScanWave™ 2.0 improves system sensitivity and SNR by 20-30% over ScanWave™ 1.5. The probe interface module (PIM) is completely redesigned to make it easier for the user to load probes and mount the holder to the AFM. Installing the PIM on the AFM only requires the twist of a thumbscrew.



Signal to Noise comparison for ScanWave™ 1.5 vs ScanWave™ 2.0 on a standard Al-dot sample

ScanWave™ 2.0 is a complete redesign of our ScanWave™ 1.5 product line - This is already apparent by its new form factor. It is an industry robust product which improves on all aspects of our very successful ScanWave™ 1.5 product line. It is significantly easier to use and further advances imaging electrical properties of samples with less effort.

Specifications	ScanWave™ 2.0
Measurements	sMIM-C; sMIM-R; dC/dV Amplitude & Phase; dR/dV Amplitude & Phase;
Compatible SPM imaging mode	Contact, Non-contact, Intermittent
Microwave Frequency	~3 GHz
Minimum Detectable Capacitance	0.5 aF
Dopant sensitivity range	10^{15} atoms/cm ³ - 10^{21} atoms/cm ³
Probe tip radius	<25 nm
Electrical Spatial Resolution	<10 nm
Noise Floor	0.5 aF
Microwave Power	-33 dBm to -13 dBm
Probe material	Shielded solid metal
Bias	+/- 10 V from DC to 150 kHz
Output	+/- 10 V analog; up to 300 kHz bandwidth
AFM compatibility	Asylum Research Cypher S & MFP-3D; Bruker Dimension ICON & EDGE