Introduction

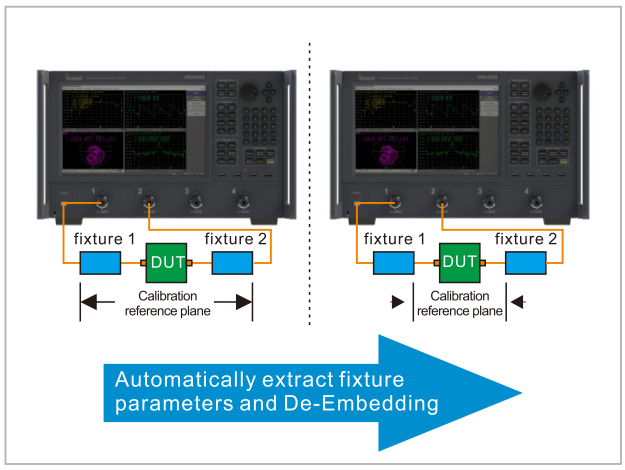
The VNA4435 vector network analyzer delivers exceptional measurement accuracy across an ultra-wide frequency range from 100 kHz to 43.5 GHz, which addresses demanding test requirements for RF and microwave components operating in C, X, Ku, K, Ka bands.

Engineered for versatility, the VNA4435 excels in both research and development environments and high-volume production testing across multiple industries including wireless communications, satellite systems applications.

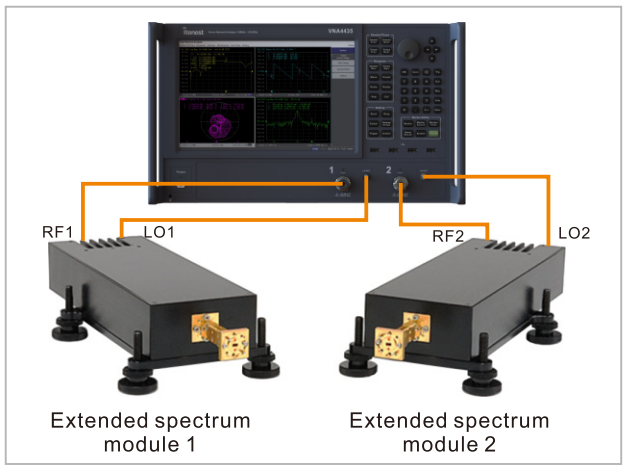
- Intuitive Operation: featuring a high-resolution 12.1-inch touchscreen display , the VNA4435 provides an intuitive user interface that streamlines complex measurement tasks.
- Comprehensive Measurement Capabilities: the VNA-P incorporates full two or four ports vector network analyzer functionality with advanced calibration algorithms, ensuring measurement accuracy. The instrument supports sophisticated fixture simulation capabilities including port matching and IFD (Intelligent Fixture De-embedding) algorithms, enabling precise characterization of devices under non-ideal test conditions.Advanced analysis functions include time-domain and eye diagram measurements, providing comprehensive signal integrity analysis.
- Scalable Architecture for Future Requirements: the advanced design concept supports frequency extension to millimeter-wave such as 110GHz and Terahertz ranges by external frequency extension modules, protecting your investment while enabling characterization of next-generation components.
- Flexible Calibration Methods: full compatibility with mainstream mechanical and electronic calibration kits ensures measurement flexibility across diverse test scenarios. The VNA4435 adopts both traditional SOLT and advanced SOLR/TRL/IFD calibration methods.



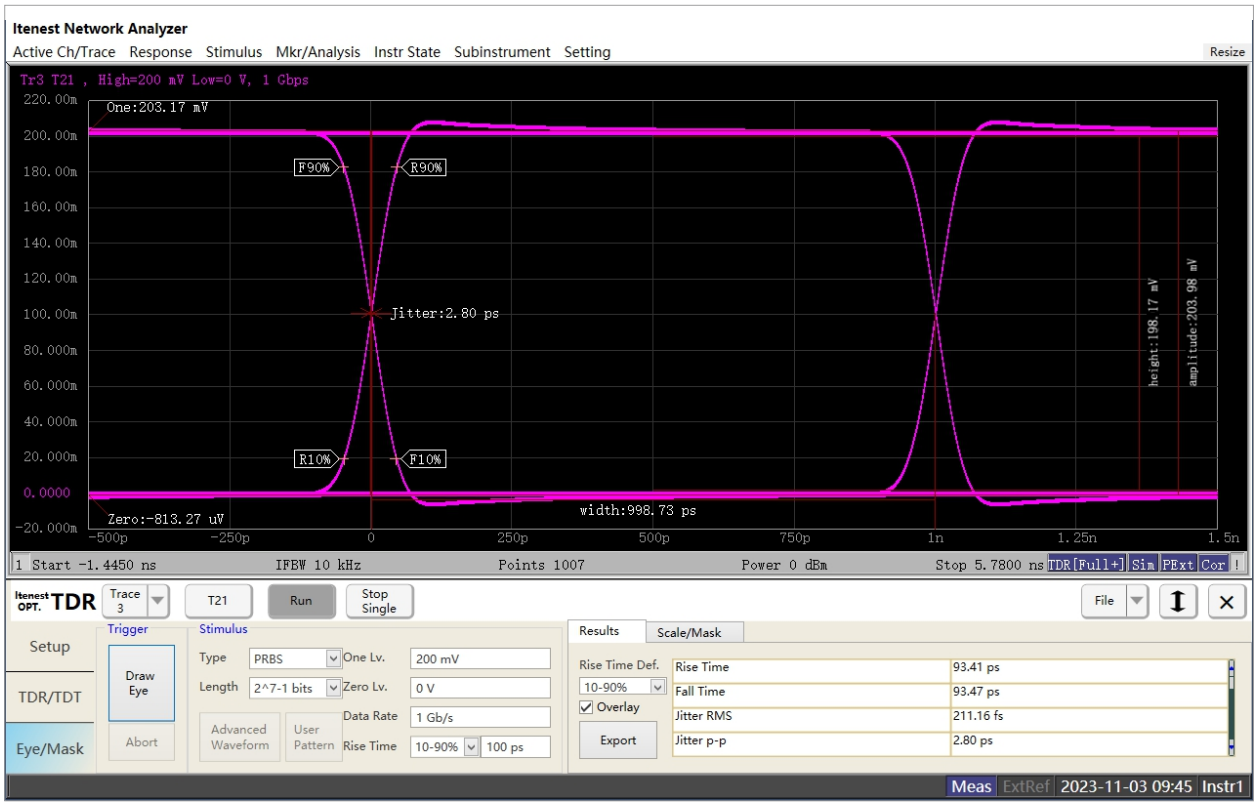
Key Features



Efficiently solving the testing difficulties of non-standard connector components by IFD



Millimeter Wave Frequency Band Expansion Test



Enhance TDR eye Diagram

Technical Specifications

SYSTEM MEASUREMENT RANGE		
Frequency Range	100kHz to 43.5GHz	
Number of Test Ports	2 or 4	
Test Port Connector Type	NMD 2.4mm, male	
Output Power Range	-55dBm to +10dBm	
System Impedance	50Ω	
Frequency Setting Resolution	1Hz	
Power Setting Resolution	0.05dB	
Number of Measurement Points	2 to 100,001	
System Bandwidth(IFBW)	10Hz to 1.5MHz	
System Dynamic Range: (RF Range Fixed Mode=OFF) @IFBW=10Hz	100kHz to 500kHz	95dB
	500kHz to 2MHz	110dB
	2MHz to 5.8GHz	135dB
	5.8GHz to 26.5GHz	130dB
	26.5GHz to 43.5GHz	125dB
MEASUREMENT ACCURACY(UNCERTAINTY)		
Noise: Meas. Power=Max Output Power		
Transmission	100kHz to 10MHz(IFBW=3kHz)	4mdB rms/0.03deg rms
	10MHz to 6GHz(IFBW=70kHz)	4mdB rms/0.03deg rms
	6GHz to 26.5GHz(IFBW=70kHz)	3mdB rms/0.02deg rms
	26.5GHz to 43.5GHz(IFBW=70kHz)	4mdB rms/0.03deg rms
Reflection	100kHz to 10MHz(IFBW=3kHz)	5mdB rms/0.05deg rms
	10MHz to 6GHz(IFBW=70kHz)	5mdB rms/0.03deg rms
	6GHz to 26.5GHz(IFBW=70kHz)	4mdB rms/0.04deg rms
	26.5GHz to 43.5GHz(IFBW=70kHz)	5mdB rms/0.04deg rms