

CRXVT

Vector Network Analyzers



The **Multiport Series** **Vector Network Analyzers**

(X709) specializing in multiport measurements. The hardware and software design of the X709 analyzers eliminates the need for an RF switch matrix, optimizes the calibration process, enhances accuracy, and accelerates measurements.

The X709 is a general-purpose multiport solution available in 6/8/10/12/14/16 ports designed to measure a wide range of devices:

- *multiport antennas*
- *switches*
- *cable assemblies*
- *diplexers*
- *multi-channel power dividers and combiners*

Users can increase the number of measuring ports to 16. Please contact the CRXVT Service Center

The versatile enclosure design allows you to use the analyzer on a desk or easily install it in a 19-inch rack as part of an automated measurement system.

Strong and durable connectors, accomplished with their ergonomic layout make it easy to connect the analyzer to the DUT.

The X709 Vector Network Analyzers are controlled by an external PC running next-generation software. It features a state-of-the-art GUI and a wide range of measurement capabilities.*

Key Features:

- Multiport analyzer in benchtop form factor (6 to 16 ports)
- Basic measurement capabilities: S-parameters and absolute power measurement, balanced measurement
- Calibrating with mechanical kit or Automatic Calibration Module
- Windows/Linux-based Software
- Software remote control via SCPI (over HiSLIP or TCP/IP Socket)

Optional measurement capabilities:

- AFR-X - Automatic Fixture Removal
- TD-X - Time domain analysis with gating
- ACP-X - Compression point measurement
- MXR-X - Frequency converting devices measurement

* A PC is not included.

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Available models

Model	Frequency Range	Impedance / Number of Ports	Measured Parameters	Dynamic Range ¹ (typ.)	Output Power	Measurement Time per Point (typ.)
X709-6	300 kHz to 9 GHz	50 Ohm/6	S11, S21 ... S66	140 dB	-45...+10 dB	24 µs
X709-8		50 Ohm/8	S11, S21 ... S88			
X709-10		50 Ohm/10	S11, S21 ... S1010			
X709-12		50 Ohm/12	S11, S21 ... S1212			
X709-14		50 Ohm/14	S11, S21 ... S1414			
X709-16		50 Ohm/16	S11, S21 ... S1616			

Software and Hardware Capabilities

CALIBRATION OPTIONS	
Support for Automatic Calibration Modules	Yes
Calibration with a Power Meter	Yes
MEASUREMENT CAPABILITIES	
Fixture Simulation (Embedding and De-embedding)	Yes
Time Domain Analysis and Gating (TD-X option)	
Balanced Device Measurements	Yes
Source to Receivers frequency offset mode (MXR-X option)	Yes
Scalar Mixer Calibration and measurement (MXR-X option)	Yes
Vector Mixer Calibration and measurement (MXR-X option)	Yes
Frequency Offset Adjustment (MXR-X option)	Yes
Automatic Fixture Removal (AFR-X option) ²	Yes
Compression point measurement (ACP-X option)	Yes
SYSTEM REQUIREMENTS	
Operating System	Windows 10 and above, Linux
Processor	3.3 GHz
RAM	8 GB
Communication interface	USB 2.0 High Speed

¹ With a 10 Hz IF filter bandwidth.

² The AFR-X option supports 16-port devices

