

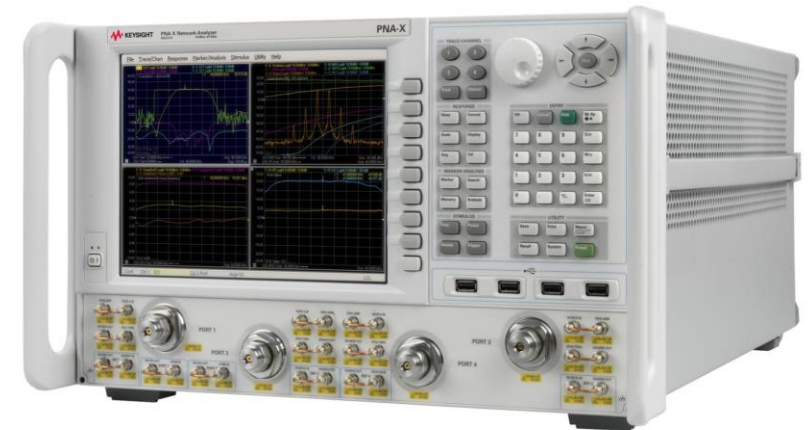
Wang Hall Equipment: Advanced RF measurements

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PNA-X: N5247A (will be changed to B)

1. A device used for comprehensive wave analysis, providing capabilities for measuring and analyzing the performance of RF (radio frequency), microwave, and millimeter-wave components such as antennas, filters, and amplifiers.
2. PNA-X is known for its high precision, wide dynamic range, and ability to perform complex modulation.
3. The device at Wang hall has extension modules to allow for operation anywhere between a few MHz up to 330 GHz.



PNA-L: N5232B

1. PNA-L is a more economical option within the PNA (Performance Network Analyzer) family, designed to provide **essential** network analysis capabilities. PNA-L analyzers are used to measure reflection and transmission characteristics (S-parameters) of RF and microwave components, offering good performance in terms of speed, accuracy, and dynamic range.
2. These analyzers are typically employed for testing components such as filters, amplifiers, and antennas, supporting applications that require the characterization of RF devices' linear behavior.
3. The device at Wang hall allows for operation anywhere between a few MHz up to 20 GHz.



PXA Signal Analyzer: N9030B

1. A device designed for analyzing complex RF (Radio Frequency), microwave, and millimeter-wave signals. The PXA offers exceptional performance and accuracy in signal analysis, making it ideal for demanding applications in wireless communication, aerospace and defense, and electronic warfare.
2. PXA can be used to measure different RF signal characteristics.
 - Spectrum Analysis
 - Signal Power
 - Modulation analysis
 - Harmonic Distortion
 - Signal-to-Noise Ratio



Arbitrary-Waveform Generator: M8196A

1. AWG is a sophisticated instrument designed to generate electrical waveforms with precise control over the shape, frequency, phase, and amplitude of the signal. This flexibility allows users to create complex and custom waveforms that mimic real-world signals or test specific scenarios in communications, radar systems, and electronic component testing.
2. Applications
 - **Communications:** It's used for testing and development of communication equipment and systems, including 5G, LTE, and other wireless technologies.
 - **Radar and Electronic Warfare:** For radar systems, the AWG generates signals that mimic those in operational environments, including clutter, noise, to test radar receiver sensitivity and signal processing algorithms.
 - **Semiconductor Testing:** high-speed serial data streams or other complex waveforms.



- sample rate up to 92 GSa/s, 8-bit vertical resolution
- 32 GHz analog bandwidth

UXR Oscilloscope: UXR0134A

1. known for its extremely high bandwidth and sampling rate, which makes it capable of capturing and analyzing very fast signals in today's electronic devices and communication systems.

2. Applications

- **High-Speed Digital System Design**
- **Wireless Communications**
- **Semiconductor Characterization**



- 4 full bandwidth channels
- 13 GHz bandwidth

mixed signal Oscilloscope: MXR058A

1. 500 MHz on 8 analog channels

