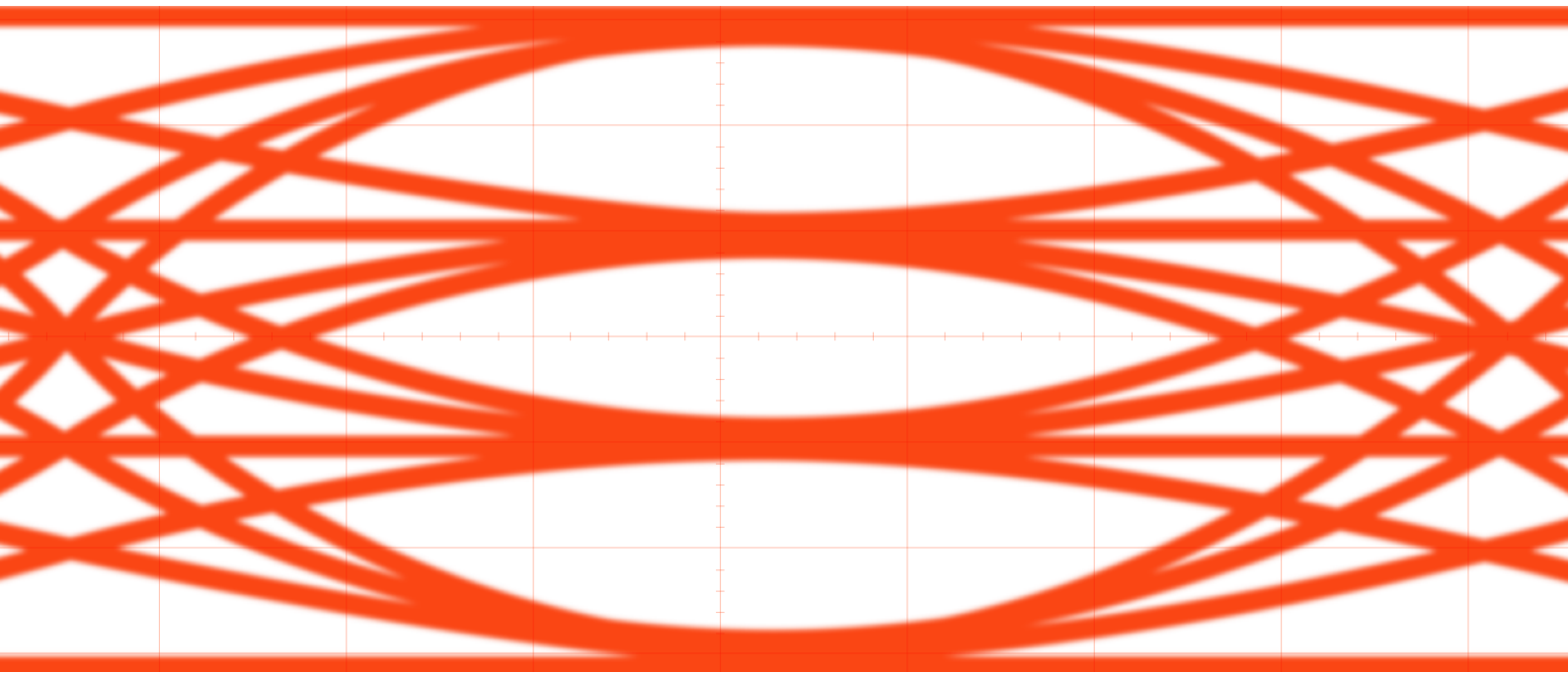


High-Speed Digital System & Semiconductor Design Catalogue

A Better Way to Procure Your Equipment



High-Speed and Semiconductor Test Equipment

Electro Rent specialises in providing industry-leading equipment to support testing in the high-speed semiconductor industry. Evolving high-speed data rates often places pressure on companies to make additional investments to keep up with ever-increasing standards. Each year, we make significant investments in our inventory to make the latest technologies available as they are introduced.

Your Premier Test Equipment Partner

Formerly Microlease and Livingston, Electro Rent are experts in HSD Test Equipment. We know what it takes to deliver the right configurations on time with rental and financial solutions that make sense for your organisation.

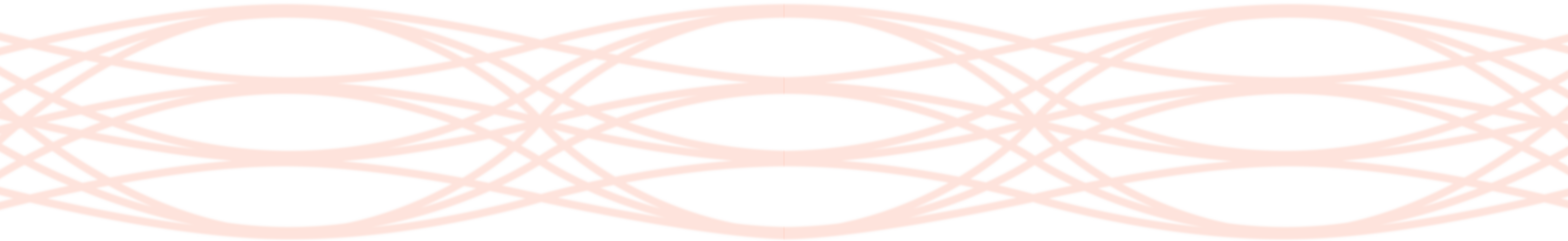
Through our global fleet of \$1B worth of electronic test equipment assets from more than 200+ manufacturers, our solutions help companies solve their test and measurement challenges in today's fast-moving business environment.

Experience Our Extensive Inventory

Browse our catalogue for the most popular high-speed semiconductor test equipment offerings. If you don't see what you need, give us a call. We have thousands of additional models in stock and new acquisitions arrive all the time.

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Global Reach, Local Support

Supported by our inventory, we help businesses around the world with unrivaled local support, logistics hubs, and expertise.

Our innovative test procurement solutions are designed to integrate seamlessly into your existing operations. We work with you to drive down your overall cost of testing by increasing productivity while reducing equipment management costs.

60 years of innovation	20 locations worldwide
500 global team members	7k models
\$1Bn inventory	95k instruments
200 manufacturers	11k product lines

Industry-Leading Test Equipment Rental Solutions

The ultimate in flexibility, our rental packages provide access to the latest test equipment in a fast and affordable way. With the world's largest inventory and constant investment to keep our product portfolio up to date, renting helps you access the latest equipment, when and where you need it.

FULL FLEXIBILITY

Upgrade, extend, or end your rental as needed

EXTENSIVE INVENTORY

Thousands of instruments are in stock and ready to rent today

PAY FOR USE, NOT FOR LIFE

Rent from as little as one week, with low-cost, long-term plans available

MINIMIZE OWNERSHIP COSTS

Maintenance and calibration included

LOCAL PRESENCE

Local logistics hubs, as well as sales and support offices

FAST DELIVERY

Delivery typically within 24-48 hours of your order

EXPERT SUPPORT

Support and advice from our team of specialists, supported by our OEM partners

THE LATEST TECHNOLOGY

Our updated and refreshed inventory ensures leading products from world-class manufacturers

We offer independent advice on products from 200+ world-class manufacturers.





Keysight M8050A | High-Performance BERT, 120 GBaud

- Symbol Rates from 2 to 120 GBaud
- Support for Non-Return-To-Zero (NRZ), PAM3, PAM4, PAM6, and PAM8 Line Coding
- Next Generation 800G/1.6T Ethernet, USB4v2 and other Receiver & Transmitter Conformance Standards Supported



Keysight M8040A | High-Performance BERT, 64 GBaud

- Data Rates from 2 to 64 GBaud
- Support for Non-Return-To-Zero (NRZ), PAM3, PAM4 Line Coding
- IEEE 802.3 ethernet support for 100, 200, and 400 Gigabit



Keysight M8020A | High-Performance BERT, 16 or 32 Gb/s

- Data rates from 8.5/16 Gb/s for Pattern Generator and Error Detector
- Applications Include: PCI Express, USB, MIPI M-PHYTM, SATA/SAS, DisplayPort, SD UHS-II, Fibre Channel, Thunderbolt, 10 GbE, 100 GbE (optical and electrical), SFP+, CFP2/4 transceivers, CEI.

Also Available: Keysight M8062A | 32Gb/s BERT Front End for M8020A

- Extends Data Rate of the M8020A BERT to 32 Gb/s
- Built-In Jitter Injection and Calibrated (LFPJ, HF PJ, Clk/2, BUJ, RJ, SSC)
- Built-In Clock Recovery



Anritsu MP2110A | BERTWave Sampling Oscilloscope

- All-In-One Sampling Oscilloscope Plus BERT
- 4-Channel 25 GHz Sampling Oscilloscope Plus Clock-Recovery Unit
- Low-cost solution for Testing 10G to 800G Optical Modules
- SFP28, QSFP28, CFP2/4/8, SFP56, QSFP56, OSFP, QSFP-DD Modules Supported



Anritsu M1900A | Signal Quality Analyzer

- Data rates to 64 GBaud NRZ, PAM4
- 58 GBaud PAM4 BER Measurements Supported
- PCIe Gen1-5 Link Training Supported with Jitter Tolerance for PCIe Gen 6



Keysight M8054A | Interference Source Module, 1-slot AXIe, 32 GHz

- Signal Impairment Generation up to 64 GBaud
- Receiver Test for Devices with PCIe Gen 4/5, OIF CEI, SAS
- Channel Margin Test and Optical Receiver Stress Test IEEE 802.3bs, bj, by, cd, Fibre Channel



Keysight M8199B | Arbitrary Waveform Generator; 2-Channel, 128 Gsa/s

- Analog Bandwidth to 70 GHz (90 GHz @ -10 dB)
- 2 and 4-Channel Models with 128 Gsa/s and 256 Gsa/s
- Perfect for higher-order QAM modulation at 160 GBaud and Above



Keysight M8194A | Arbitrary Waveform Generator; 4-Channel, 120 Gsa/s

- 45 GHz Bandwidth with 400G and 1 Terabit Applications
- 8-Bit Resolution with 512 kSa Waveform Memory
- Use with 81195A Optical Modulation Generator Software



Keysight M8195A | Arbitrary Waveform Generator; 4-Channel, 65 Gsa/s

- 25 GHz Bandwidth for Wideband SATCOM, Radar, and Optical Applications
- Controllable from M8070A BERT Software for MIPI C-PHY and D-PHY Signals
- 16 Gsa Extended Memory Capable of Generating PRBS7, PRBS10, PRBS11, PRBS15 up to PRBS31 Patterns



Keysight M8190A | Arbitrary Waveform Generator; 2-Channel, 12 Gsa/s

- Analog Bandwidth of 5 GHz
- 14-Bit Resolution to 8 Gsa/s, 12-Bit Resolution to 12 Gsa/s
- Up to 2 Gsa Arbitrary Waveform Memory with Advanced Sequencing
- 90 dBc Spurious Free Dynamic Range (SFDR) with DC and AC Amplifiers

SCAN
QR CODE

We have thousands more instruments in our comprehensive equipment inventory.

Scan QR Code to view our full selection.





- Tektronix AWG70002B** | Arbitrary Waveform Generator; 2 Channel at 25 GSa/s
- 10-bit Vertical Resolution, 16 GS Waveform Memory Per Channel
 - Generate Wideband RF Signals Up To 20 GHz
 - Suitable for Radar with Options for Pulsed Waveforms and Impairments



- Tektronix AWG5208** | Arbitrary Waveform Generator; 8 Channel, 4 GHz
- 2-Port and 4-Port Versions with Configurable Test Sets
 - Up to 4 Sources Available
 - High Dynamic Range 147 dB with Receiver Attenuators
 - Internal Pulse Modulators and Pulse Generators
 - Wide Range of Software Options Available for Rental



- Keysight 81160A** | Pulse/Function/Arbitrary Noise Generator; 2-Channel
- Pulses to 330 MHz, Sinewaves to 500 MHz Sine, 2.5 GSa/s Arbitrary Waveforms
 - Applications Include Automotive Ethernet 1G Rx Compliance
 - 14-Bit Resolution with Programmable Rise/Fall Times
 - High Voltage Amplifier Output (10Vpp/100 Ω)



- Keysight M8197A** | Multi-Channel Synchronization Module; for M8195A
- Synchronize up to 4 M8195A Modules or 16 Independent Channels
 - Create Phase-Coherent I/Q Signal Pairs, MIMO and Multi-Lane Serial Applications



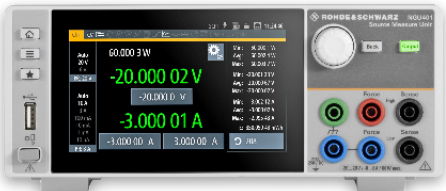
- NI PXIe-5451** | PXI Waveform Generator; 2-Channel, 145 MHz
- 16-Bit Resolution
 - Advanced Synchronization and Data Streaming Capabilities
 - DSP Features for Pulse Shaping, Interpolation Filters, and Oscillator Control



- Keysight 81134A** | Pulse Pattern Generator; 2-Channel, 3.35 GHz
- 12 MSa Memory-Based Pattern Generation
 - Applications Include Jitter Generation with RZ/NRZ/R1 Data Formats
 - PRBS with CCITT/ITU Formats to 2-31



- Keysight B2912B** | Precision Source Measure Unit, 2-Channel
- Four-Quadrant Sourcing and Measurement Capability
 - 10 fA Resolution, 210 V, 3 A DC, 10.5 A Pulse
 - Digitizes 100k Measurements per Second



- Rohde & Schwarz NGU411** | Four-Quadrant Source Measure Unit
- 20 V to 20 V, 20 W
 - 500 kS/s for Voltage and Current
 - Battery Simulation Software Available
 - Graphical Touchscreen



- Keysight N1060A** | Precision Waveform Analyzer Module; 2-Channel, 50/85 GHz
- High Bandwidth to > 90 GHz, residual jitter as low as 45 fs
 - Adjustable Clock Recovery Peaking and Loop Bandwidth
 - Supported Communication Data Rates from 125 MBd to 64 GBd



- Keithley 2450** | Graphical Digitizing SourceMeter
- Four-Quadrant Sourcing and Measurement Capability
 - 200 V/1 A DC, 10 nA to 1 A
 - High-Resolution Graphical Touchscreen



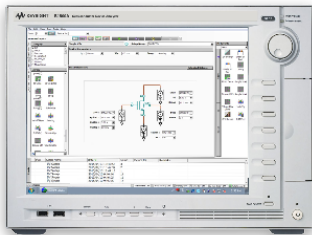
- NI PXIe-4147** | PXI Source Measure Unit; 4-Channel, 8 V/3 A
- 4-Quadrant, 4-Channel SMU in PXIe Format
 - High-Speed Sequencer for Synchronizing with other SMUs and PXIe Instruments
 - 100 fA/100 nV Resolution



- Keysight CX3324A** | Device Current Waveform Analyzer; 1 GSa/s, 4-Channel
- Technology Marries Precision Scope with High-Sensitivity DMM
 - High-Resolution/High-Speed Sampling @ 14-Bit 1 GSa/s or 16-Bit 75 MSa/s
 - Applications Include Low-Power IoT Devices, Chipset Device Characterization, Power Delivery, and Power Rail Testing



- Keysight PZ2100A** | Precision Source Measure Unit Mainframe
- Four Slots for 5 SMU Module Options
 - Scalable to 20 Channels
 - Choose from High-Resolution SMU, High-Speed SMU, Precision SMU, High-Density SMU, and 5-Channel Precision SMU



- Keysight B1500A** | Semiconductor Device Analyzer Mainframe
- Modules support IV Measurements, Capacitance Measurements, Pulsed IV and Transient IV Measurements
 - B1511A Module: 100V/100mA Four-Quadrant Operation
 - B1520A Module: Capacitance Measurement, AC Impedance with 1 kHz to 5 MHz Source and 25 VDC Bias



- Keysight N1094A** | Dual Channel Oscilloscope, DCA-M; 50 GHz
- Direct Connection with USB to PC. No Mainframe Required.
 - 1250 nm to 1600 nm for 45 GHz Channel
 - Fast Throughput with 250 kHz sample rate
 - Accurate high data rate analysis with <200 fs jitter



- Keithley 2651A** | High Power System SourceMeter SMU
- Four-Quadrant Sourcing and Measurement Capability
 - 50 A/40 V/2000 W
 - Connect two units in Series or Parallel for 100 A or 80 V Operation



- Keysight N1055A** | Remote Sampling Head Module; 2/4 Port, 35/50 GHz
- Fully Integrated TDR/TDT/S-Parameter Measurement System
 - Multiple S-Parameters up to 16 Simultaneous Ports
 - TDR Step Times as Fast as 6 ps



- Keysight N1076B** | Electrical Clock Recovery Module
- Provides Standards-Compliant Clock Recovery Capability on Electrical NRZ and PAM4 Signals from 125 MBd up to 64 GBd
 - Includes Adjustable Loop Bandwidth and Selectable Peaking

Source Measure Units

Model	OEM	Description	Type	Power	Quadrants	Channels
N6784A	Keysight	4-Quadrant General-Purpose Source Measure Unit	Module	±20 V, ±1 A or ±6 V, ±3 A/20 W	4	1
N6785A	Keysight	SMU for Battery Drain Analysis	Module	20V,±4Aor15V,±5Aor10V,±6.7Aor6V,±8A/80W	2	1
N6782A	Keysight	2-Quadrant Source Measure Unit for Functional Test	Module	20 V, ±1 A or 6 V, ±3 A/20 W	2	1
B2912B	Keysight	Precision Source Measure Unit	Benchtop	±210 V, ±3 A/10.5 A pulse, 6½ Digit Resolution	4	2
B2902B	Keysight	Precision Source-Measure Unit	Benchtop	±210 V, ± 3 A/10.5A Pulse, 5½ Digit Resolution	4	2
B2962B	Keysight	Low Noise Power Source, 6½ Digit	Benchtop	± 210V, ±3A/32W	4	2
NGU201	Rohde & Schwarz	2-Quadrant Source Measure Unit	Benchtop	20 V, ±8 A/60 W	2	1
NGU401	Rohde & Schwarz	4-Quadrant Source Measure Unit	Benchtop	±20 V, ±8 A/60 W	4	1
NGU411	Rohde & Schwarz	4-Quadrant Source Measure Unit	Benchtop	±20 V, ≤ 10 V, ±2 A > 10 V, ±1 A/20 W	4	1
2470	Keithley	SourceMeter SMU Instrument	Benchtop	±1000 V, ±1 A/20 W	4	1
2461	Keithley	High-Current SourceMeter SMU	Benchtop	±100 V, ±10 A/1000 W	4	1
2450	Keithley	SourceMeter SMU Instrument	Benchtop	±200 V, ±1 A/20 W	4	1
2651A	Keithley	High Power System SourceMeter SMU Instrument	Benchtop	±40 V, ±50 A/2000 W	4	1
2657A	Keithley	High Power System SourceMeter SMU Instrument	Benchtop	±3000 V, ± 120 mA/180W	4	1
6430	Keithley	Sub Femtoamp Remote Source Meter	Benchtop	±200V, ±100 mA/2.2W	4	1
2400	Keithley	SourceMeter SMU Instrument	Benchtop	±200 V, ±1 A/20 W	4	1
PXIe-4147	NI	PXI Source Measure Unit; PXIe, 4-Channel	PXIe	±8 V, 3 A/24 W	2	4
PXIe-4139	NI	PXI Source Measure Unit; PXIe, 1-Channel	PXIe	±60 V, ±3 A, ±10 A Pulsed/40 W	4	1
PXIe-4142	NI	PXI Source Measure Unit; PXIe, 4-Channel	PXIe	±24 V, 150 mA/3.6 W	2	4



Keysight N1093B | Dual Optical Channel Sampling Scope; DCA-M 60GHz

- 60 GHz dual optical DCA-M with integrated clock recovery
- Low-noise, low-jitter, high-sensitivity optical measurements
- Supports accurate optical testing up to 120 GBd
- USB-controlled platform scales to high-volume manufacturing



Anritsu MP2110A | BERTWave Sampling Oscilloscope

- All-In-One Sampling Oscilloscope Plus BERT
- 4-Channel 25 GHz Sampling Oscilloscope Plus Clock-Recovery Unit
- Low-cost solution for Testing 10G to 800G Optical Modules
- SFP28, QSFP28, CFP2/4/8, SFP56, QSFP56, OSFP, QSFP-DD Modules Supported



Keysight N1040A | Dual Electrical Channel Module; 33/60 GHz

- High Bandwidth to > 60 GHz, residual jitter as low as 90 fs
- Lower Cost Module with up to 8 Channels per Mainframe



Keysight N1092A | Single Channel Oscilloscope, DCA-M; 45 GHz

- Direct Connection with USB to PC. No Mainframe Required.
- 1250 nm to 1600 nm for 45 GHz Channel
- Fast Throughput with 250 kHz sample rate
- Accurate high data rate analysis with <200 fs jitter



Keysight N1046A | Electrical Sampling Head Module for DCA-X; 4CH 100GHz

- 4-channel remote electrical sampling head for DCA-X
- 100 GHz-class performance with 1 mm inputs
- Remote head architecture minimizes path loss at the DUT
- Designed for uncompromised performance to 100 GHz and beyond



Keysight N1030A | Single Channel Optical Module; 65 GHz

- 1250 to 1600 nm Nominal Wavelength, Factory Calibrated 1310, 1550 nm
- Reference Receivers for 25 Gb/s Ethernet, 400GBASE-SR16, 32G Fibre Channel & More



Keysight N1000A DCA-X | Wide-Bandwidth Oscilloscope Mainframe

- Mainframe Supports Modules Greater than 100 GHz with up to 16 Channels.
- 4-Channel 25 GHz Sampling Oscilloscope Plus Clock-Recovery Unit
- Replaces 86100C/D and Supports Legacy Modules



Keysight N1032A | Single Channel Optical Module; 90/120 GHz

- 120 GHz Optical Bandwidth with Jitter as Low as 90 fs
- Perfect for Analyzing 112 GBd (224 Gbps) Optical Signals
- Supports NRZ and PAM4 Applications



Keysight UXR1104A | Infiniium UXR-Series Oscilloscope; 110GHz 4CH 256GSa/s

- 110 GHz, 4 channels, 256 GSa/s real-time capture
- 10-bit ADC for ultra-low noise and high signal fidelity
- Up to 2 Gpts memory; DDC upgrade path to 2.16 GHz
- Built for mmWave, USB4, PCIe, DDR and phase-noise work



Keysight UXR0504B | Infiniium UXR Real-Time Oscilloscope

- 50 GHz real-time oscilloscope bandwidth, upgradable to 110 GHz, for advanced high-speed signal analysis.
- 256 GSa/s sample rate on all channels enables accurate capture of fast, complex signals.
- High-accuracy measurement performance with 10-bit ADC, low noise and jitter floor, high ENOB, built-in SDA/clock recovery, InfiniiSim Basic, and PrecisionProbe/PrecisionCable.



Keysight UXR0594B | Infiniium UXR-Series Oscilloscope; 59GHz 4CH 256GSa/s

- 59 GHz, 4 channels, 256 GSa/s real-time capture
- 10-bit ADC with low noise and low jitter floor
- 500 Mpts/ch standard, upgradable to 2 Gpts/ch
- 160 MHz DDC included; upgradeable to 2.16 GHz



Keysight UXR0254AP | Infiniium UXR Real-Time Oscilloscope; 4 Channels, 25 GHz

- 25 GHz 4 full bandwidth channels 10 bit ADC
- 256 GSa/s sample rate on all channels
- Up to 2 Gpts of memory Upgradable to 110 GHz
- Optional calibration module for on-site self-calibration

NEW!

Keysight XR804KA

Infiniium XR8-Series Oscilloscope; 33GHz 4CH 128GSa/s 12-Bit

- Configured to 33 GHz, 4 channels, 128 GSa/s with 12-bit ADC
- Compact XR8 platform with custom ASIC and up to 8 Gpts
- Lower noise and stronger signal integrity for SerDes debug
- Built for next-gen digital validation and faster analysis





Keysight UXR0334B | Infiniium UXR Real-Time Oscilloscope; 4 Channels, 33 GHz

- Up to 2G Memory with 256 GS/s on All Channels
- Low Noise Inputs: 129 μ V (rms) Noise with 10 GHz of Bandwidth
- Includes InfiniSim Basic De-embedding, PrecisionCable, and PrecisionProbe as Standard Options
- 70% Faster Application Speeds vs UXR A



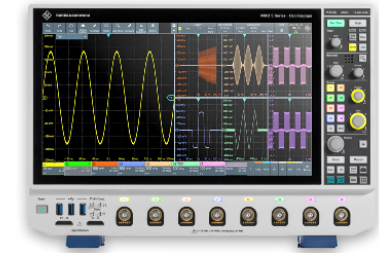
Keysight UXR0134B | Infiniium UXR-B Series Oscilloscope; 13GHz 4CH 128GSa/s

- 13 GHz, 4 channels, 128 GSa/s real-time capture
- 10-bit ADC with low noise and high signal fidelity
- 500 Mpts/ch standard, upgradable to 2 Gpts/ch
- 160 MHz DDC included; upgradable to 2.16 GHz



Keysight EXR608A | Infiniium EXR-Series Real-Time Oscilloscope; 8 Channels, to 6 GHz

- Sample Rate: 16 GS/s 100 Mpts Record Length Upgradeable to 400 Mpts
- 10-Bit ADC with 16-Bits in High Resolution Mode
- Upgradeable Bandwidth from Available Stock



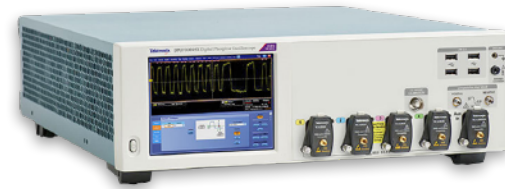
Rohde & Schwarz MX058 | Digital Oscilloscope; 8 Channels

- Frequency Ranges: 100, 200,350, 500 MHz, 1, 2 GHz
- 500 Mpts Memory Standard on 8 Channels
- 12-Bit ADC for High Vertical Resolution and Digital Triggering
- 45k FFT/s on 4 Simultaneous Displays



Rohde & Schwarz RT064 | RTO-6 Series Oscilloscope; 4GHz 4CH 20GSa/s

- 4 GHz, 4 channels, 20 GSa/s performance
- 1 million waveforms/s for fast anomaly capture
- 16-bit HD digital trigger with zone and spectrum tools
- Apps for power, jitter, de-embedding and TDR analysis



Tektronix DPS75904SX | ATI Performance Oscilloscope System, 33/50 GHz

- 2 Channels @ 50 GHz 200 GS/s, or 4 x 33 GHz 100 GS/s
- For Datacom Standard: 100GBASE KR-4, CR-4, 25 Gb Phy KR, CR for 100G
- Software Available for PCIe Gen 5/6 Debugging and Compliance Testing



Keysight MXR608B | Infiniium MXR-Series Real-Time Oscilloscope; 8 Channels, to 6 GHz

- Sample Rate: 16 GS/s on 8 Channels, 200M Record Length per Channel
- 10-Bit ADC with 16-Bits in High Resolution Mode
- Low Noise: 1mV/div 43 μ V, Low Jitter: 120 fs rms
- Real Time Spectrum Analysis on 8 Scope Channels
- Faster Application Speeds vs MXR A



Tektronix DPS75004SX | ATI Performance Oscilloscope System, 33/50 GHz

- 2 Channels @ 50 GHz 200 GS/s, or 4 x 33 GHz 100 GS/s
- > 25 GHz Edge Trigger
- Software Available for PCIe Gen 5/6 Debugging and Compliance Testing



Tektronix MS068B | Mixed Signal Oscilloscope; 8 Channel to 10 GHz

- Frequency Range: 1, 4, 6, 8, 10 GHz Models
- Low Noise Inputs: < 1.25 mV of Noise at 50 mV/div at 10 GHz
- Built-In FFT Spectrum Analysis on all Channels
- 50 GS/s on 2-Channels, 25 GS/s on 4-Channels



Rohde & Schwarz RTP164B | RTP-B Series Oscilloscope; 16GHz 4CH 40GSa/s

- 16 GHz, 4 channels, 40 GSa/s with long record length
- Real-time de-embedding with S-parameters in hardware
- Strong app support for USB3.2, DDR, MIPI and Auto Ethernet
- High-performance RTP platform in a compact form factor

NEW!

Tektronix DPO714AX

7 Series Digital Phosphor Oscilloscope; 25GHz 4CH 125GS/s

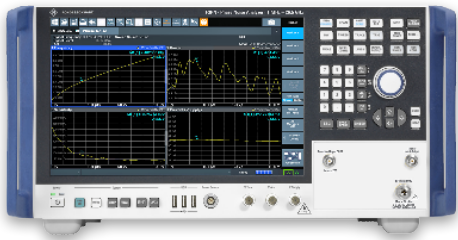
- Configured to 25 GHz, 4 channels, up to 125 GS/s
- High ENOB, low noise and low jitter signal path
- Up to 2 Gpoints record length for long captures
- TekScope UI speeds high-speed serial and RF debug





Keysight E5055A | SSA-X Signal Source Analyzer, 10 MHz to 8 GHz

- Fast Cross Correlation Measurements
- Phase Noise: -169 dBc/Hz @ 1 GHz Carrier (10 kHz Offset)
- Software Options Include: Pulsed Analysis, Spectrum Analysis
- Two Built-in Isolated DC Voltage Channels



Rohde & Schwarz FSWP26 | Phase Noise Analyzer; 1 MHz to 26.5 GHz

- Full-featured Phase Noise Analyzer and Spectrum Analyzer
- Phase Noise: -166 dBc/Hz @ 1 GHz Carrier (10 kHz Offset)
- Low Phase Noise Internal LO, Needs No External Sources
- Cross-Correlation Measurements for 25 dB Improved Sensitivity



Keysight N4375D | Lightwave Component Analyzer; Single-Mode, 26.5 GHz

- Guaranteed Responsivity to 26.5 GHz.
- Extended Calibration Support for Advanced Test Setups
- Built-in Optical Power Meter with User-selectable Transmitter Power



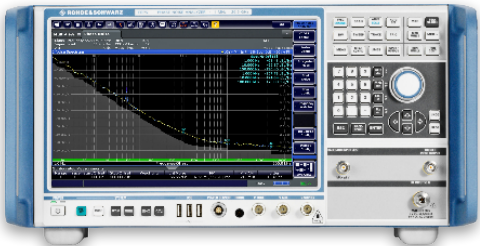
Quantifi Photonics IQRX-1005-FA-EPIQ | High Performance Coherent Optical Receiver

- Dual Polarization
- Supports PSK, QAM and Custom Modulation Formats
- Single-Ended RF 1.85mm Outputs



Rohde & Schwarz FSWP50 | Phase Noise Analyzer; 1 MHz to 50 GHz

- Full-featured Phase Noise Analyzer and Spectrum Analyzer
- Phase Noise: -166 dBc/Hz @ 1 GHz Carrier (10 kHz Offset)
- Low Phase Noise Internal LO, Needs No External Sources
- Phase Noise @ 50 GHz: -138 dBc/Hz (10 kHz Offset)



Rohde & Schwarz FSPN26 | Phase Noise Analyzer and VCO Tester; 1 MHz to 26.5 GHz

- Cross-Correlation and High-Speed for VCOs, OXCOs, DROs
- Phase Noise: -163 dBc/Hz @ 1 GHz Carrier (10 kHz Offset)
- Offset Frequency Range: 1 μ Hz to 1 GHz.



Keysight 8163B | Lightwave Multimeter Mainframe

- Consists Of Two Slots for Hosting Power Modules, Return Loss Modules, Compact Tunable Lasers, or Fixed Laser Sources
- Includes Built-In Applications: Return Loss, Passive Component Test, Stability, and Logging



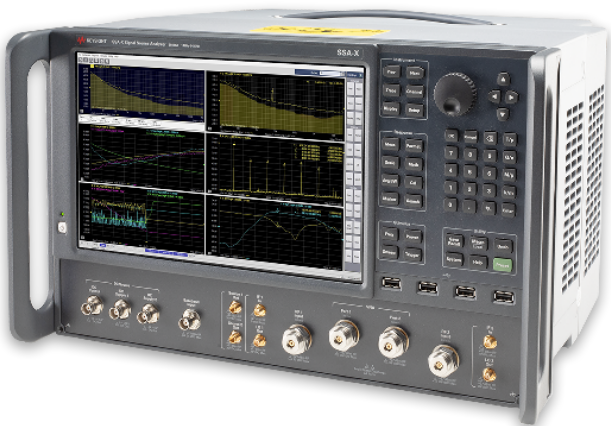
Keysight 8164B | Lightwave Measurement System Mainframe

- 1 Slot for a Tunable Laser Source
- 4 slots for Power Modules, Return Loss Modules, Compact Tunable Lasers, or Fixed Laser Sources
- Built-in Applications: Passive Component Test, Stability, Logging

FEATURED!

**Keysight E5058A
SSA-X Phase Noise Analyzer**

The SSA-X Series now extends to mmWave with the addition of 26.5, 44 and 54 GHz models to the Series. Typical enhanced low phase noise performance of -148 dBc/Hz @26.5 GHz with 10 kHz offset and -143 dBc/Hz @ 50 GHz with 10 kHz offset. With optional VNA ports and spectrum analysis, this full-featured instrument will make significant improvements in 5G and SATCOM mmWave workflows.



Keysight 81491A | Reference Transmitter

- 33 GHz Electro-Optical Bandwidth
- Can Serve as E/O Converter
- NRZ and PAM4 Signals to 32 GBaud
- 1310 & 1550 nm Single Mode Fiber, 850 nm Multimode Fiber



Keysight 81492A | Reference Transmitter

- 40 GHz Electro-Optical Bandwidth
- Can Serve as E/O Converter
- NRZ and PAM4 Signals to 56 GBaud
- 1310 & 1550 nm Single Mode Fiber



Keysight E5061B | ENA Series Network Analyzer/Impedance Analyzer, 100 kHz to 3 GHz

- 3 GHz Network Analyzer and Impedance Analyzer in One Unit
- Gain-Phase Test Port, 5 Hz to 30 MHz for Impedance Measurements
- Compatible with Keysight Component Measurement Fixtures



Keysight E4991B | Impedance Analyzer; 1 MHz to 3 GHz

- Built-in DC Bias to ± 40 V
- Measures: $|Z|$, $|Y|$, L_s , L_p , C_s , C_p , R_s (R), R_p , X , G , B , D , Q , θ_z , Γ_y , $|\Gamma|$, Γ_x , y , θ_r



Keysight E4990A | Impedance Analyzer, 20 Hz to 120 MHz

- 25 m Ω to 40 M Ω Wide Impedance Measurement Range
- Measurement Parameters: $|Z|$, $|Y|$, θ , R , X , G , B , L , C , D , Q , Complex Z , Complex Y , V_{ac} , I_{ac} , V_{dc} , I_{dc}
- Built-in DC bias range: 0 V to ± 40 V, 0 A to ± 100 mA



Keysight E4980A | Precision LCR Meter; 20 Hz to 2 MHz

- 0.05% Basic Accuracy
- Optional DC Bias to ± 40 V
- Wide Range of Test Fixtures



Rohde & Schwarz LCX200 | SLCR Meter, 4 Hz to 500 kHz

- Frequency Extendable to 1 MHz or 10 MHz
- Test Signal Range: 100mV to 10V, with current of up to 200 mA
- Measurement Parameters: C_p , C_s , L_p , L_s , D , Q , G , R_p , R_s , R_{dc} , R , X , Z , Y , θ_d , θ_r , B , M , N



GW Instek LCR-8210 | High-Frequency LCR Meter; 10 Hz to 10 MHz

- Models Available from 1 MHz to 5, 10, 20, 30 MHz
- Internal DC Bias Voltage ± 12 V
- Measurement Parameters: Z , L_s/L_p , C_s/C_p , R_s/R_p , Q , D , Y , G , X , θ_d/θ_r , B , R_{dc}

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