

# O-NICE Test and Measurement Business Introduction

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## Company Brief

O-NICE TECHNOLOGY CO., LIMITED established in 2010 in Shenzhen, China, providing services such as sales, leasing and maintenance of test solutions and instruments for various R&D and production customers.

O-NICE is always following the corporate philosophy of "Serving customers with heart" . We have many years of industry service experience, perfect marketing network, rich product resources and professional technology solutions. Our customer group has covered all areas of the communications industry.





# Main Business



**Sales**



**Rent/Leasing**



**Post-sales  
service**





# Industry Scope



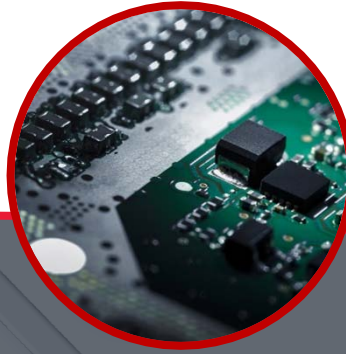
**Automotive/  
New Energy**



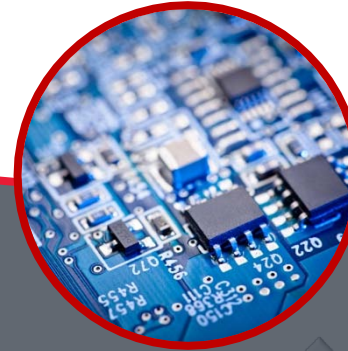
**RF/mmWave**



**Wireless**



**PCB/LCR**



**Semicon/IC**



**Internet**



## **One-stop Service:**

Instruments sales(including used equipments), rental and post-sales service to meet customers diversified test demands

## **Professional People:**

20+ Sales

5+ FAEs with average 10 years knowledge

## **Industry-leading Stocks:**

500+ instruments assets

20+ international T&M brands

## **Worldwide Coverage:**

Mainland China, the United States, Europe, India, Russia, Brazil, South Africa, Japan, South Korea, and more



# Major Suppliers

 <b>KEYSIGHT</b> TECHNOLOGIES	 <b>ROHDE &amp; SCHWARZ</b> 罗德与施瓦茨公司	 <b>Anritsu</b>	 <b>Tektronix</b>	 <b>LITEPOINT</b> A Teradyne Company
 <b>TELEDYNE LECROY</b> Everywhere you look™	 <b>KEITHLEY</b> A Tektronix Company	 <b>spirent</b> ™	 <b>EXFO</b>	 <b>YOKOGAWA</b>
 <b>VPI</b> Virginia Diodes, Inc.	 <b>OML</b>	 <b>farran</b>	 <b>FOCUS</b> MICROWAVES	 <b>Maury Microwave</b> Your Calibration, Measurement & Modeling Solutions Partner!
 <b>Chroma</b>	   <b>DAHUA</b>	 <b>AMETEK</b> ®	 <b>ar</b> worldwide	 <b>GORE</b>
 <b>FORMFACTOR</b> ™	 <b>MPI CORPORATION</b>	 <b>SEMISHARE</b>	 <b>EOULU</b>	 <i>Picoprobe</i> BY GGB INDUSTRIES INC.



## RF/Microwave Test

- Signal Generator
- GNSS Simulator
- Signal Analyzer
- Phase Noise Analyzer and VCO analyzer
- Network Analyzer
- Mechanical and Electronic calibration
- Power Meter and Sensor

## Wireless Communication Test

- Signaling Tester
- Non Signaling Tester

## Digital Test

- Oscilloscope
- Bit Error Rate Tester(BERT)
- Arbitrary Waveform Generator
- High speed digital bus testing fixture
- Protocol Analyzer
- Logic Analyzer

## Optical Communication Test

- Sampling Oscilloscope
- CDR Clock Recovery

## Semiconductor Test

- Semiconductor Analyzer
- Source Meter Unit(SMU)

## Universal Test

- Multi-meter
- Power Supply & Electronic Load
- Function Generator
- RF Devices & Accessories

# Signal Generator



**ROHDE & SCHWARZ**  
**SMW200A**

## Vector Signal Generator

- 100 kHz to 3 GHz, 6 GHz, 12.75 GHz, 20 GHz, 31.8 GHz or 40 GHz ;
- Internal baseband up to 2 GHz I/Q modulation bandwidth for 4th and 5th generation standards (5G, LTE Advanced and IEEE 802.11ac/ad)



**KEYSIGHT**  
**E8257D**

- Wide frequency range: 13, 20, 31.8, 40, 50, and 67 GHz models available (1.1 THz with frequency extender)
- Test high-power devices and overcome test system losses with options capable of generating up to 1 W (+30 dBm) of output power
- Get extremely low phase noise:  $-91$  dBc/Hz at 100 Hz offset and  $-126$  dBc/Hz at 10 kHz offset (10 GHz), to address Doppler radar, ADC and receiver-blocking tests
- Characterize devices and circuits by adding AM, FM, PM and pulse modulation to your signal





# Spectrum Analyzer



**ROHDE & SCHWARZ**  
**FSW8/ FSW13/FSW26/FSW43/FSW50**

- Unparalleled low phase noise and best sensitivity on the market
- Max.8.3 GHz internal analysis bandwidth
- Max.800 MHz real-time analysis bandwidth
- SCPI recorder simplifies code generation
- High dynamic range enables outstanding EVM performance



**KEYSIGHT**  
**N9030B PXA Signal Analyzer**

- Analyze more with a wide frequency range of 2 Hz to 50 GHz with up to 510 MHz analysis bandwidth
- See small signals in the presence of large ones with up to 75 dB of spurious-free dynamic range (SFDR)
- Extend the frequency up to 110 GHz with Keysight smart mixers
- Record, analyze, and simulate real-world scenarios with gap-free streaming up to 255 MHz
- Capture transient or intermittent signals with optional real-time spectrum analysis capabilities



# Network Analyzer



## ROHDE & SCHWARZ ZNB

- Frequency range from 9 kHz to 4.5/8.5 GHz and 100 kHz to 20/26.5/40/43.5 GHz;
- Two or four ports
- Wide dynamic range of up to 140 dB
- Short sweep times of 4 ms for 401 points
- Wide power sweep range of 98 dB



## KEYSIGHT N5242B/44B/45B/47B PNA-X Microwave Network Analyzer

- 900Hz/10 MHz to 26.5 /43.5/50/67GHz,
- 2 and 4 ports, one or two sources, up to three sources
- a dynamic range of 124 dB to 129dB
- high source output power ranging from +13 dBm at 1 GHz to +11 dBm at 67 GHz



# Oscilloscope



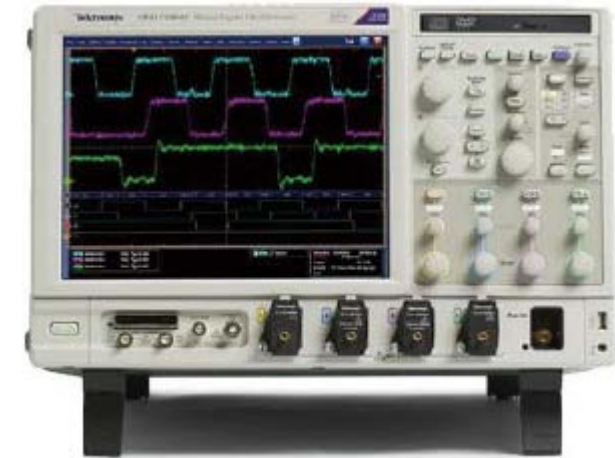
KEYSIGHT  
**UXR0594A/0504A/0334A**

**UXR0594A:** 59 GHz, 4 channel, Infiniium UXR-Series real-time oscilloscope  
**UXR0504A:** 50 GHz, 4 channel, Infiniium UXR-Series real-time oscilloscope  
**UXR0334A:** 33 GHz, 4 channel, Infiniium UXR-Series real-time oscilloscope.



KEYSIGHT  
**3000TX series  
DSOX3104T**

**DSOX3104T:** 1 GHz oscilloscope provides 4 analog channels, 4 Mpts memory, 1,000,000 waveforms/sec update rate and standard touch zone trigger with an 8.5-in capacitive touch screen.



TEKTRONIX  
**MSO/DPO70000DX** Mixed Signal/Digital Phosphor Oscilloscopes

**MSO70000 series** is one of the most advanced oscilloscopes in its class, perfect for analog/digital design and debug, data communications and high-speed serial communications.

- Bandwidth: **8 GHz -33 GHz**
- Record length: up to **1G** points
- Channels: **4** analog, **16** digital (MSO)
- Sample rate: up to **100 Gs/s**



# Wireless communication tester



## ROHDE & SCHWARZ CMW500

- Multi-RAT signaling: LTE, WCDMA, GSM, WLAN, Bluetooth
- LTE-Advanced: 8DL CC up to 4x4/8x2 MIMO fading, 2 UL CA
- WLAN 11 a / b / g / n / ac / ax SISO and MIMO signaling test
- Internal server for application testing



## ROHDE & SCHWARZ CMW100

- Continuous frequency range up to 6 GHz and RF bandwidth up to 160 MHz
- Parallel testing on up to eight bidirectional RF ports
- Wide range of methods to reduce test time and maximize capacity utilization
- High measurement performance – high measurement accuracy
- Fanless for silent operation – highest reliability due to dustproof housing



# BERT system



**KEYSIGHT  
M8040A**

- Data rates from 2 to 64 GBaud PAM4 signal
- True PAM4 error detection in real-time up to 58 GBaud
- Built-in de-emphasis, analyzer equalization, and clock recovery
- Integrated and calibrated jitter injection: RJ, PJ1, PJ2, SJ, BUJ, and clk / 2 jitter
- Two pattern generator channels per module to emulate aggressor lane
- Interactive link training and SKP OS filtering for 8 / 16 / 32 / 64 GT/s PCI Express®
- Algorithmic PRBS, QPRBS, and memory-based patterns, pattern sequencer
- For PAM4, gray coding, FEC encoding, and precoder and error distribution analysis



**ANRITSU  
MP1900A**

MP1900A series is an 8-slot modular, high-performance BERT supporting all-in-one Physical layer measurements of both high-speed network interfaces as NRZ and PAM4, and PCI Express/USB, bus interface

# Arbitrary Waveform Generator



**KEYSIGHT  
M8195A**

- High-speed AWG with up to 65 GSa/s sample rate and 25 GHz bandwidth on up to 4 channels per module
- 8-bit vertical resolution
- Produce NRZ, PAM4, PAM8, DMT, etc. signals at up to 32 GBaud
- Support protocols such as HDMI™, C-PHY™ and D-PHY™
- Embed / de-embed channels, add jitter, ISI, noise, and other distortions
- Supply any mathematically defined arbitrary waveforms, ultra-short yet precise pulses, and extremely wideband chirps
- Enable up to 1 Vpp(se) or 2 Vpp(diff) output amplitude



**KEYSIGHT  
M8190A**

- 14-bit resolution up to 8 GSa/s
- 12-bit resolution up to 12 GSa/s
- Variable sample rate from 125 MSa/s to 8 / 12 GSa/s
- Up to 90 dBc SFDR
- 2 GSa memory per channel
- 5 GHz analog bandwidth
- Radar, Satellite, Electronic Warfare, Multilevel Signals
- ADC testing (Analog Digital Converter testing), Jitter Margin Testing
- Digital Video, Noise Power Ratio Measurement, Wireless HD, HDMI, MHL
- IEEE 802.11ad, CaTV, OFDM, Software Defined Radio



**TEKTRONIX  
AWG7000B Series**

- Vertical Resolution: 8, 9, or 10 bits
- Analog Bandwidth: Up to 15 GHz
- Output Frequency: 13.5GHz/20 GHz
- Max Sample Rate: 25 GS/s or 50 GS/s
- Record Length: 2 GS, 16GS, or 32 GS





# Protocol Analyzer



**LECROY**  
**Summit Z516 Exerciser**

The Summit Z516 is a PCIe 5.0 and CXL protocol traffic generation test tool used for critical test and verification intended to assist engineers in developing and improving the reliability of their systems. The Summit Z516 can emulate PCI Express 5.0 and CXL root complexes or device endpoints, allowing new designs to be tested against corner case issues



**LECROY**  
**Summit T516 Analyzer**

The Summit T516 is targeted at high-speed PCI Express 5.0 and CXL I/O-based applications such as workstation, desktop, graphics, storage, and network card application



**ELLISYS**  
**BEX400**

Industry's First All-In-One Wideband BR/EDR and Low Energy sniffer with concurrent capture of Wi-Fi 2x2 802.11 a/b/g/n, 2.4 GHz spectrum, HCI (USB, UART, SPI), WCI-2, logic signals, generic I2C/UART/SPI/SWD, and Audio I2S

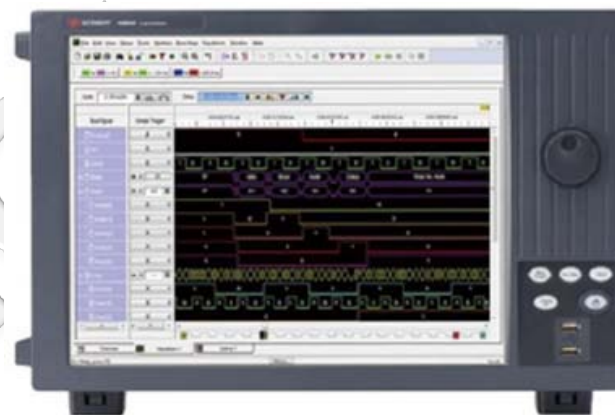


# Logic Analyzer



**KEYSIGHT  
U4164A**

- Industry' s highest data rate state mode (up to 4 Gb/s)
- Highest deep trace timing mode (up to 10 GHz),
- Deepest memory (up to 400 Mb)
- Enabling validation and debug of DDR4 or LPDDR4 at data rates over 3.5 Gb/s



**KEYSIGHT  
16861A**

- 34 channels, 350 MHz state, 12.5 GHz timing zoom, 2.5 GHz timing, 2 Mb depth standard
- 15-inch (38.1 cm) color, touch-screen display for viewing and quickly navigating large numbers of signals and buses
- Built-in removable SSD drive, USB 3.0 ports, and LAN for fast data transfer and storage of large amounts of data
- 1.4 GHz trigger sequencer to ensure high-speed events are captured

# Optical Communication Tester



## KEYSIGHT N1060A 50/85 GHz Precision Waveform Analyzer

A three-slot wide DCA-X module that integrated two 50/85 GHz electrical channels with a clock recovery (CDR) and a precision timebase (PTB) to provide residual jitter as low as 45 fs for more accurate jitter measurements



## KEYSIGHT N1000A DCA-X Wide- Bandwidth Oscilloscope Mainframe

The N1000A DCA-X wide-bandwidth oscilloscope provides accurate and precise measurements on high-speed digital designs from 50 Mb/s to 224 Gb/s. Configure the N1000A DCA-X mainframe by selecting from plug-in modules to match your desired bandwidth, filtering, and sensitivity.



## KEYSIGHT N1092A 28/45 GHz Single Optical Channel DCA-M with Option CDR

- High sensitivity with <5 uW noise
- Fast throughput with high 250 kHz sample rate
- Accurate high data-rate analysis with <200 fs jitter
- Small footprint from compact design
- Unfiltered bandwidth >40 GHz (option 40A)
- Integrated clock recovery available (option CDR)



# Semiconductor Analyzer



## KEYSIGHT B1500A

B1500A With B1500A-A02 Standard Pack 2 - High Resolution Package (High Resolution Unit 4ea, Cables), B1500A-030 3m Cable, B1500A-060 60Hz Line Frequency



## KEYSIGHT B1506A

- Wide operation range up to 3 kV/1500 A
- Fully automated fast thermal test from -50 °C to +250 °C
- Automatic power device (semiconductor and component) datasheet creation
- Auto record function to prevent data loss



# Universal Tester



**KEYSIGHT  
34460A/34461A/34465A  
Digital Multimeter**

6.5 digit basic Truevolt DMM with Truevolt technology for greater accuracy and quicker measurement insights



**KEYSIGHT  
N6705C**

The N6705C DC Power Analyzer provides unrivaled productivity gains for sourcing and measuring DC voltage and current into the DUT



**KEYSIGHT  
N3300**

- N3300 Series Modular DC Electronic Load
- Modular flexibility with 16-bit measurements



**KEYSIGHT  
N6781A/2UA, N6784A/4UA  
N6785A**

**N6781A/2UA:** 2-Quadrant Source/Measure Unit for Battery Drain Analysis, 20 V,  $\pm 1$  A or 6 V,  $\pm 3$  A, 20 W

**N6784A/4UA:** 4-Quadrant General-Purpose Source/Measure Unit,  $\pm 20$  V,  $\pm 1$  A or  $\pm 6$  V,  $\pm 3$  A, 20 W

**N6785A:** Source/Measure Unit for Battery Drain Analysis, Multiple Ranges, 80 W, Double-wide

# RF Devices & Accessories



Frequency multiplier



Circulator-Isolator



RF bridge



Coupler



Power Divider



Attenuator



Amplifier



DC Block



Detector



Half rigid and half flexible cable



RF cable



VNA test Cable



## Your Trusted T&M Service Provider



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