Product Portfolio & Solution 2025

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KEYSIGHT

Product group

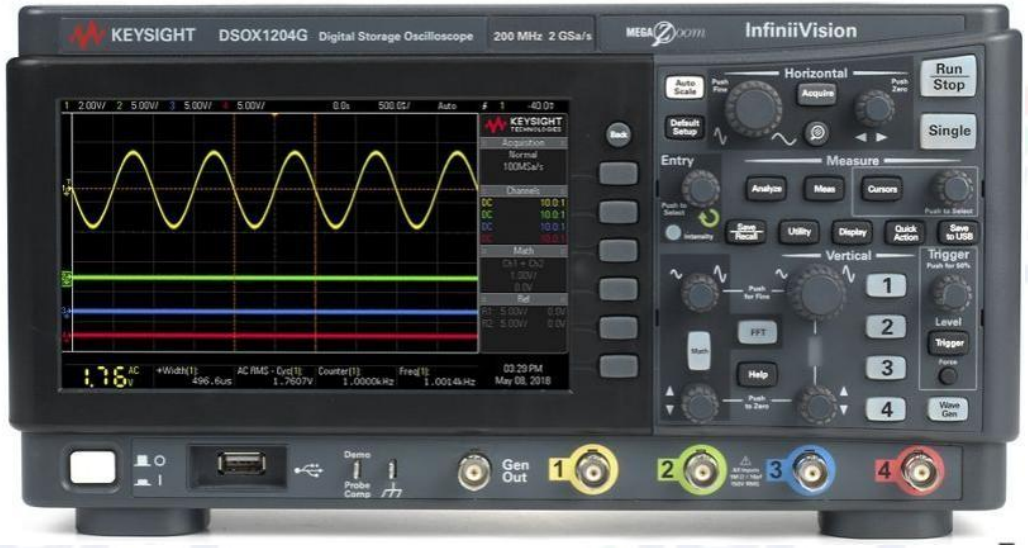
Distribution & Advance technical product

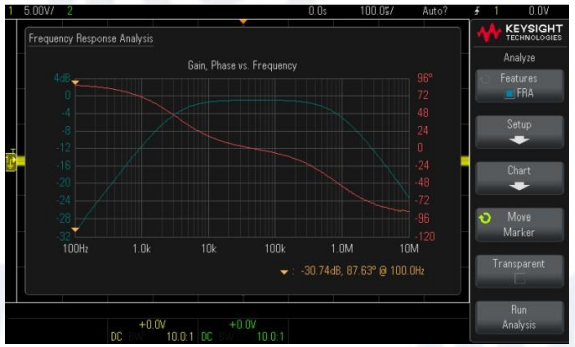
- Digital Oscilloscope (Real-time)
- Digital Multimeter
- Data Acquisition Unit
- DC Power Supply / AC Source
- Waveform/Function Generator
- Frequency Counter
- DC Electronic Load
- LCR / Impedance Analyzer
- Source Measure Unit / Curve tracer
- Software & GPIB interface

- Oscilloscope (Sampling)
- Spectrum / Signal Analyzer
- Signal Generator
- Vector Network Analyzer
- Power Meter / Power Sensor
- Vector Network Analyzer
- Audio Analyzer
- Photonic / Lightwave / Optical tester
- EMI/EMC compliance tester
- Wireless/Mobile test set

Digital Oscilloscope

1000-X series

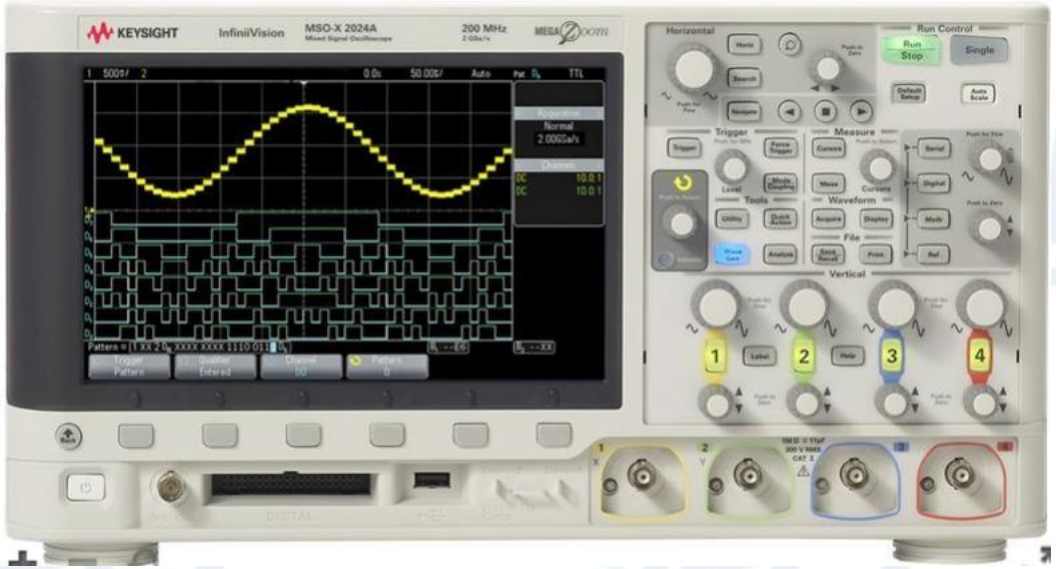




Channels	:	2 or 4
Bandwidth	:	50MHz, 70-200 MHz
Memory	:	200kpts / 2Mpts
Display	:	7.0” TFT
Interface	:	USB/LAN
Decoding	:	I2C, UART/RS232 CAN & LIN
Function gen	:	20 MHz built-in
Bode plot	:	Standard with G model

Digital Oscilloscope

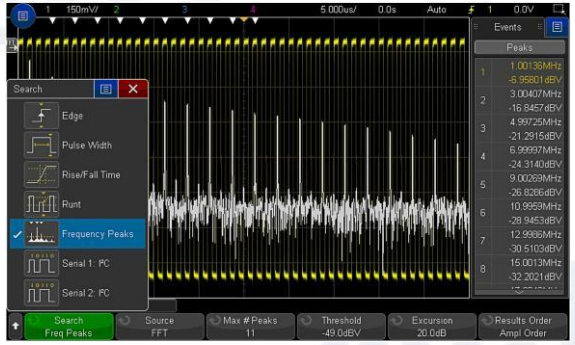
2000-X series



Analog Channels	:	2 or 4
Digital Channels	:	8
Bandwidth	:	70-200 MHz
Memory	:	1 Mpts
Display	:	8.5” TFT
Interface	:	USB/LAN/GPIB
Decoding	:	I2C, UART/RS232 CAN/LIN
Function gen	:	20 MHz built-in

Digital Oscilloscope

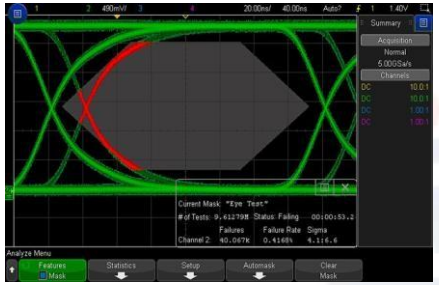
3000-G series



Analog Channels	:	2 or 4
Digital Channels	:	16
Bandwidth	:	100MHz – 1GHz
Memory	:	4 Mpts
Display	:	8.5” Touch screen
Interface	:	USB/LAN/GPIB
Decoding	:	I2C/SPI,UART, CXPI CAN/LIN, ARINC, NRZ
Function gen	:	20 MHz built-in
Application	:	Power analysis, Bode

Digital Oscilloscope

4000-G series



Analog Channels	:	2 or 4
Digital Channels	:	16
Bandwidth	:	200MHz – 1.5GHz
Memory	:	4 Mpts
Display	:	12.1” Touch screen
Interface	:	USB/LAN/GPIB
Decoding	:	I2C/SPI,UART, CXPI CAN/LIN, ARINC, NRZ
Function gen	:	20 MHz built-in
Application	:	Power analysis, Bode
Feature	:	USB-PD, jitter, histogram

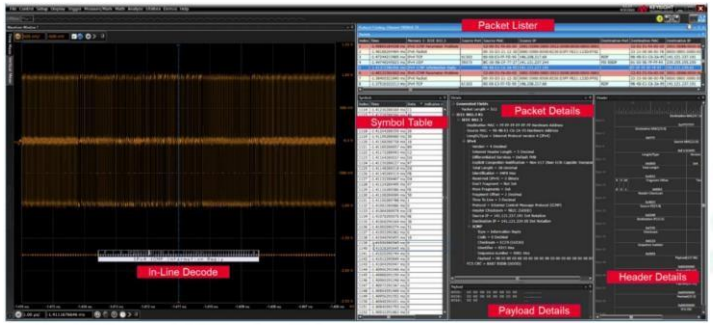
Digital Oscilloscope

HD3

Analog Channels	:	2 or 4
Digital Channels	:	16 (license*)
Bandwidth	:	200MHz – 1GHz
Memory	:	20/50/100 Mpts
ADC bits	:	14 Bits
Feature	:	Fault Hunter, Split GUI
Interface	:	USB/LAN
Decoding	:	I2C/SPI,UART, CXPI CAN/LIN, ARINC, NRZ
Function gen	:	100 MHz built-in
Application	:	Power analysis, Bode
Option	:	MSO cable *

Digital Oscilloscope

EXR/MXR series



Analog Channels	:	4 or 8
Digital Channels	:	16
Bandwidth	:	500MHz – 6GHz
Memory	:	100 Mpts -> 1.6Gpts
Display	:	15” Touch screen
Upgradable	:	Channel, S/W, MEM
RTSA	:	Up to 6GHz (MXR)*
Application	:	

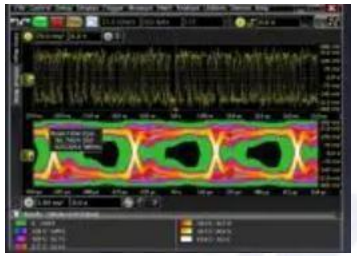
Power analysis, Bode plot, Wave gen
USB2.0, PCIe, SATA, MIPI, RFFE
CAN/LAN/FlexRay, CXPI, I2C/I3C
Jitter, Power Rail, Compliance test

High-performance Oscilloscope

UXR series

Analog Channels	:	1 or 2 or 4
ADC bits	:	10 bits
Bandwidth	:	5 to 110 GHz
Memory	:	500 Mpts to 2 Gpts
Sampling rate	:	128 or 256 GSa/sec
Connector	:	1/1.85/3.5 mm
Function	:	RTSA and DDC
Upgradable	:	Channel, S/W, MEM
Application	:	

USB 3/4, PCIe, SATA, MIPI, RFFE
FEC (KP4), 10G/100Gbase-KR, DDR
Power integrity, Signal integrity, PAM, Jitter, Wideband signal, Automotive, SFP+, QSFP+, XAUI, Thunderbolt, DP, SerDes, HDMI, IEEE802.3, OIF-CEI



Digital Oscilloscope

Probe

Passive Probe

High-Volage Differential Probe

High Temperature Probe

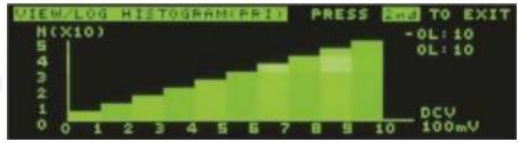
Current Probe

Power Rail Probe

High-frequency Active Probe

Digital Multimeter

34450A



Display	:	OLED, dual line
Digits	:	5 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance(2W, 4W), Capacitance, Temp
Memory	:	50 kpts
Speed	:	190 reading/sec (fast)
Interface	:	USB/RS232/GPIB
Code compatible	:	Fluke 45, Fluke 8808A

Digital Multimeter

34461A/34465A

Display	:	4.3” Graphical
Digits	:	6 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), Capacitance, Temp
Feature	:	1 µA resolution *
Memory	:	10,000 (up to 2M)
Speed	:	1000 reading/sec 50,000 reading/sec
Interface	:	USB/LAN/GPIB*
Code compatible	:	34401A/34410A

Digital Multimeter

34470A

Display	:	4.3” Graphical
Digits	:	7 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), Capacitance, Temp
Feature	:	1 µA resolution (pA)
Memory	:	50,000 (up to 2M)
Speed	:	50,000 reading/sec
Interface	:	USB/LAN/GPIB*

Digital Multimeter

3458A

Digits	:	8 ½
Feature	:	Calibration standard
Accuracy	:	4 ppm per year *
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), DC/DC ratio,
Digitizing	:	16 to 24 bits
Memory	:	148 kbytes
Speed	:	100,000 reading/sec
Interface	:	IEEE-488 (GPIB)

Digital Multimeter

34420A

Function	:	Nano-Volt / Micro-Ohm
Sensitivity	:	100 pV / 100 nΩ
Digits	:	7 ½
Feature	:	Temperature calibration
Channel	:	2 (DCV Raito)
Parameter	:	Vdc, Temperature, ratio Resistance (2W, 4W)
Sensor	:	SPRT (ITS-90), RTD, Thermocouple
Memory	:	1024 reading
Interface	:	GPIB/RS232

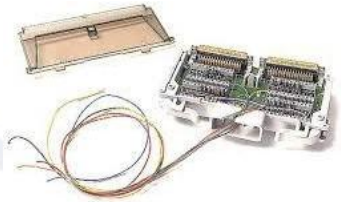
Data Acquisition & Switch Unit

DAQ970A/DAQ973A + DAQM9xx

Digits	:	6 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), Capacitance, Temp*
Config	:	Multi input selection
Scan type	:	Multiplex, simultaneous
Number of input	:	3 slots / 60ch max
Modules	:	9 types
Memory	:	1 Mega point
Software	:	Benchvue via PC
Interface	:	USB/LAN/GPIB*
Code compatible	:	34970A/34972A

Data Acquisition & Switch Unit

34980A + 349xx series



Digits	:	6 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), Capacitance, Temp*
Config	:	Multi input selection
Number of input	:	8 slots / 320ch max
Modules	:	21 types
Memory	:	500k with timestamp
Software	:	Benchvue via PC
Dimension	:	4U
Interface	:	USB/LAN/GPIB

Power Supply

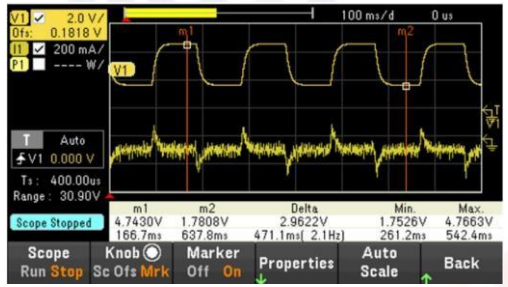
E36100B series

Power	:	30W - 40W
Channel	:	1
Display	:	OLED
Dimension	:	2U, ¼ RACK
Model	:	5 ranges
Connection	:	remote sense
Interface	:	USB/LAN

E36102B	6 V	5 A	30 W
E36103B	20 V	2 A	40 W
E36104B	35 V	1 A	35 W
E36105B	60V	0.6 A	36 W
E36106B	100 V	0.4 A	40 W

Power Supply

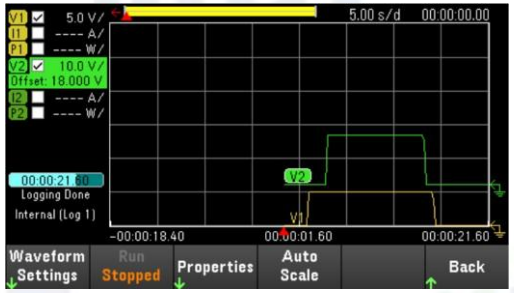
E36150A series



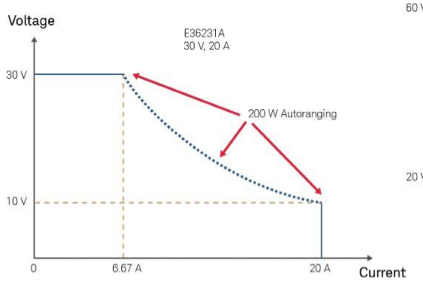
Feature	:	Built-in Scope *
		Waveform generator *
Power	:	Single output (800W)
Model	:	30V/40A or 60V/40A
Feature	:	Automotive ISO file
Function	:	Data log, Sequencing
Sampling	:	100kHz (256K Sample)
AWG memory	:	512 points
Interval	:	10 ms to 60 sec
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*

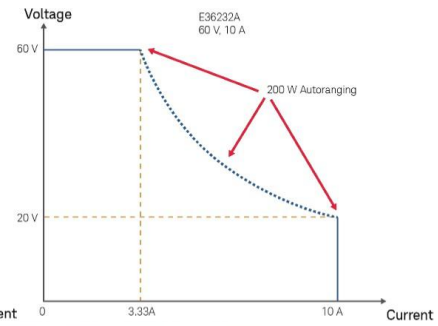
Power Supply

E36200A series



Power	:	Single output (200W)
		Dual output (400W)
Model	:	30V/20A or 60V/10A
Display	:	4.3” color graphic
Combination	:	parallel or series (2ch)
Function	:	Data log, Sequencing
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*
Code compatible	:	E3633A/E3634A





Power Supply

E36310A series

Display	:	4.3” color graphic
Combination	:	parallel or series (2ch)
Function	:	Data log, Sequencing
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*
Code compatible	:	E36311A

Performance Specifications	E36311A			E36312A			E36313A		
Power output	80 W			80 W			160 W		
DC output rating (0 to 40 °C)	1	2	3	1	2	3	1	2	3
	0 to 6 V	0 to +25 V	0 to -25 V	0 to 6 V	0 to 25 V	0 to 25 V	0 to 6 V	0 to 25 V	0 to 25 V
	0 to 5 A	0 to 1 A	0 to 1 A	0 to 5 A	0 to 1 A	0 to 1 A	0 to 10 A	0 to 2 A	0 to 2 A
Series mode voltage	NA				50 V			50 V	
Parallel mode current	NA				2A			4A	

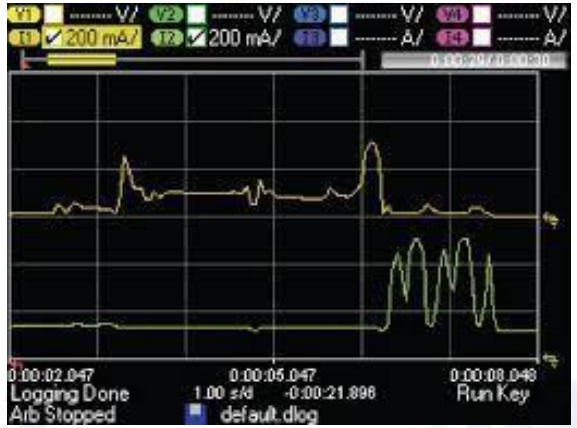
Power Supply

N6700C series

Output	:	1 to 4 (configurable)
Power	:	400W/600W/1200W *
Feature	:	Module can change by user
Config	:	source, e-load, SMU, BAT
Module	:	> 30 types
Interface	:	USB/LAN/GPIB
Connection	:	4-wire mode
Size	:	1 U rack 19” system

DC Power Supply/Analyzer

N6705C



Output	:	1 to 4 (configurable)
Power	:	up to 600 W *
Display	:	4.3” Color graphic
Feature	:	Multi-function tester
Config	:	Source, Electronic load, scope, data log, generator
Module	:	> 30 types
Memory	:	256k samples
Digitizer	:	200 kHz
Interface	:	USB/LAN/GPIB

Power Supply

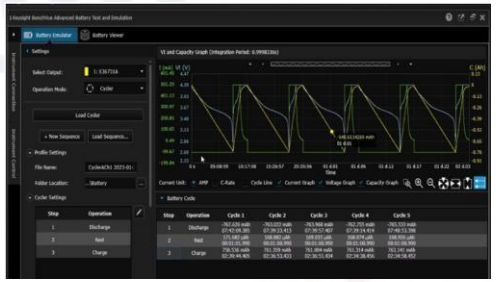
N5700/N8700 series

Built-in Ethernet, USB 2.0, and GPIB interfaces enable easy system connections

Output	:	1
Rated	:	750W/1500W (6-600V) / (1.3A-180A) 3300W/5200W (8-600V) / (5.5A-400A)
Connection	:	parallel or series (Up to 4/2 units)
Rack	:	1U, 2U
AC Input	:	Single or Three phase
Interface	:	USB/LAN/GPIB
Feature	:	Analog programming (V or R)
Code	:	compatible for Sorensen/Xantrex

Battery Emulator

E36731A + BV9210B



Solution	:	IoT Battery tester
Feature	:	Battery profiling, Battery Emulation, Battery cycling, DC Source & E-Load
Power Supply	:	200W (30V/20A)
Electronic Load	:	250W (60V/40A)
Model	:	30V/20A
Display	:	4.3” color graphic
Function	:	Data log, Scope,
Software	:	Battery Emulation *
Interface	:	USB/LAN/GPIB*

DC Electronic Load

EL30000 series

Power	:	Single output (250W) Single output (350W) Dual output (600W)
Range	:	150V/60A (up to 120A)
Display	:	4.3” color graphic
Function	:	Data log, Scope view
Digitizer	:	200kHz (256k sample)
Mode	:	CC/CP/CR/CP
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*

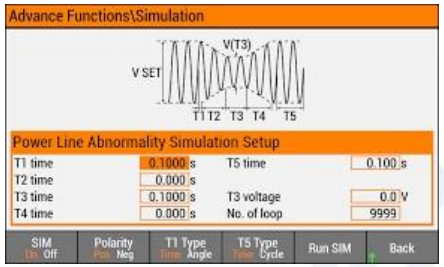
AC Source

AC6800 series

Power	:	500 to 4000 VA
Input	:	single phase
AC voltage out	:	up to 310 V
AC current out	:	up to 40 A
Frequency out	:	40 to 500 Hz
DC voltage out	:	up to 438 V
DC current out	:	up to 32 A
Feature	:	0.5% THD, > 70% eff.
Interface	:	USB/LAN/GPIB*

AC Source

AC6900 series



Power	:	3 kVA to 18 kVA
Input	:	single / three phase *
Display	:	4.3” color graphic
RMS voltage	:	320 V
RMS current	:	10 to 60 A
Frequency	:	50/60/400/800/5000 Hz *
Function	:	Power & harmonic analyzer,
Standard	:	RTCA DO-160 / MIL-STD-704
Built-in	:	Waveform generation
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*

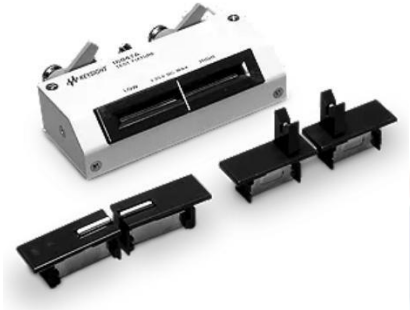
Regenerative Power System

RP7900 series

Power	:	5/10/20/30 kW
Voltage	:	20/80/160/500/950 V 1000/2000 V
Current	:	±20/40/125/250/400 A 30/60/90 A
Mode	:	2-quadrant operation
Feature	:	Parallel up to 600kW
Frequency	:	50/60/400/800/5000 Hz *
Function	:	Power & harmonic analyzer,
Standard	:	RTCA DO-160 / MIL-STD-704
Application	:	I-V curve for Photovoltaic
Connection	:	remote sense
Interface	:	USB/LAN/GPIB*

LCR meter

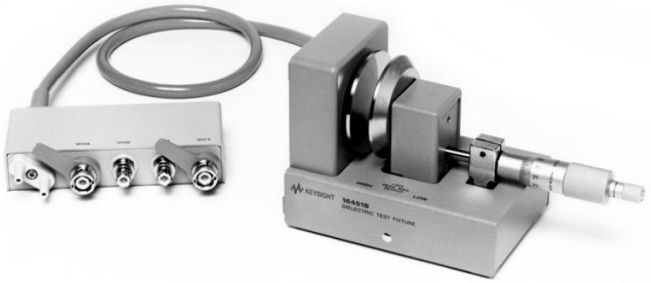
E4980B/BL series



Display	:	7 digits, Dual parameter
Frequency	:	20 Hz to 300k/500k/1/2MHz
Parameter	:	R/L/C/Z/ϕ/Y/Q/D/ESR….
Upgradeable	:	Frequency
DC bias	:	1.5V/2V
Option	:	40V or 100mA (DC bias)
Feature	:	Rdc
Built-in	:	List Sweep, BIN mode
Memory	:	201 kpts
Interface	:	USB/LAN/GPIB
Connection	:	Scanner/Handler

Impedance Analyzer

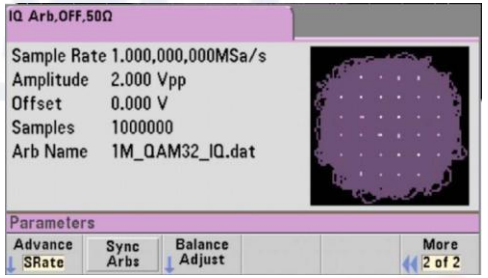
E4990A Series



Feature	:	Equivalent Circuit
Frequency	:	20Hz to 10/20/30/50/120 MHz
Parameter	:	R/L/C/Z/ϕ/Y/Q/D/ESR….
Upgradeable	:	Frequency
Display	:	10.4” Color LCD
Application	:	Material analysis
DC bias	:	40V or 100mA
Memory	:	1,601 kpts
Interface	:	USB/LAN/GPIB
Option	:	Fixture*

Waveform/Function generator

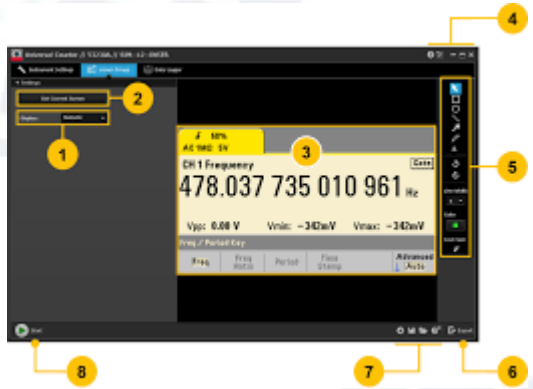
33500B series



Channels	:	1 or 2
Bandwidth	:	20MHz or 30MHz
ARB waveform	:	1 MSa (16 MSa *)
Waveform type	:	17 types
Modulation type	:	7 types
Feature	:	Upgradeable *
Built-in	:	IQ player *
Technology	:	Trueform (low THD)
Interface	:	USB/LAN/GPIB

Universal Counter

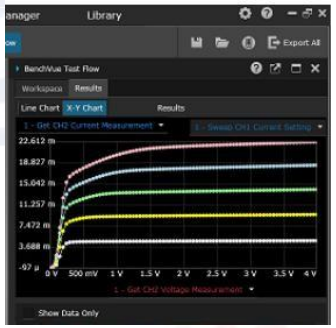
53200 series



Channels	:	1 (up to 3)*
Bandwidth	:	350MHz (up to 15GHz)*
Speed	:	12 digits/sec *
Signal input	:	CW, pulse/burst *
Modulation type	:	7 types
Feature	:	Gating, ratio, totalize
Connector	:	BNC, type-N *
Interface	:	USB/LAN/GPIB
Code compatible	:	531xx series

Source Measure Unit

B2900C/CL series



Range	:	21V or 210V
		1.5A or 3A (10.5A pulse)
Output	:	Single / Dual
Power	:	31.8W
Output	:	Single / Dual
Display	:	4.3” Color graphic
Feature	:	4-quadrant for I/V source and measurement
Resolution	:	10 fA* or 100 nV*
Sweep	:	50 µs, 100k Memory
Software	:	Quick IV
Interface	:	USB/LAN/GPIB
Compatible	:	Keithley 2400

High-Channel Density Source Measure Unit

PZ2100 Series

Channel	:	Up to 20 SMU in 1U
Power	:	3W to 11W (selection)
Output	:	1 or 5 CH per module
Range	:	210V/0.315A (PZ2210A) 60V/3.5A (PZ2120A) 30V/0.5A (PZ130A)
Sampling rate	:	Up to 15 MSa/s (10us)
Feature	:	High-speed/High-accuracy
	:	Synchronization multiple SMU
Function	:	ARB & Sweep
SCPI	:	common as B2900
Interface	:	USB/LAN/GPIB

Femto/Picoammeter

B2981B/B2983B

Current range	:	0.01 fA (0.01 x 10^{-15}A)*
Resolution	:	6 ½ digits
Display	:	4.3” Color graphic
Connection	:	Triaxial
Battery	:	Option *
Speed	:	20,000 reading/sec
Interface	:	USB/LAN/GPIB

High Resistance meter / Electrometer

B2985B/B29087B

Current range	:	0.01 fA (0.01 x 10^{-15}A)*
Resolution	:	6 ½ digits
Feature	:	Charge measurement
Voltage source	:	Up to 1000V *
Resistance	:	up to 10 PΩ *
Display	:	4.3” Color graphic
Connection	:	Triaxial
Battery	:	Option *
Speed	:	20,000 reading/sec
Interface	:	USB/LAN/GPIB

Spectrum Analyzer

N932xC series

Frequency	:	9 kHz to 4/7/13.6/20 GHz
DANL	:	- 137 dBm *
Input	:	N-type
Option	:	pre-amp, Tracking gen, AM/FM Modulation, EMI, Reflect measurement
Interface	:	USB/LAN/GPIB*

Network Analyzer

E5063A series

S-Parameter	:	2-port, 50 Ω
Display	:	10.4” touch screen
Frequency	:	100 kHz to 500MHz & 100 kHz to 1.5/3/4.5/6.5/8.5/14/18 GHz
Connector	:	N-type
Source power	:	-20 to 0 dBm
Sweep point	:	10,000 points
Option	:	TDR, wireless power transfer
Calibration	:	ECal, mechanic cal
Interface	:	USB/LAN/GPIB

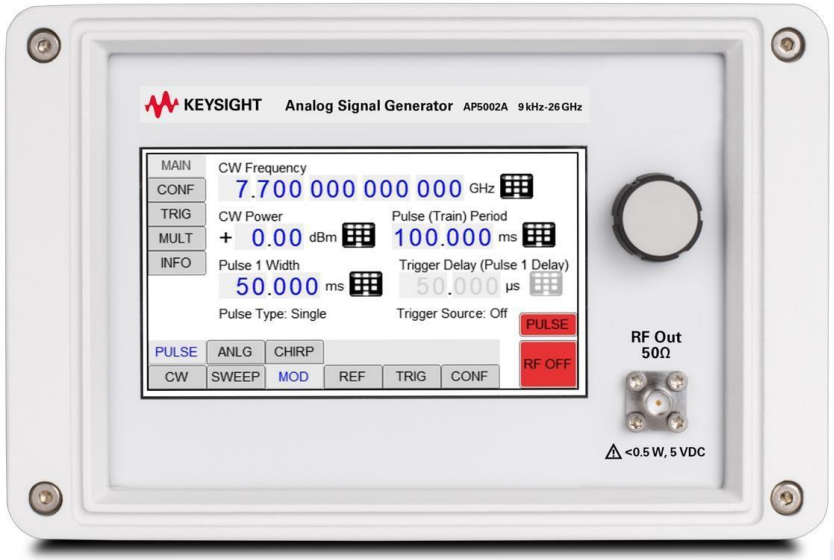
Streamline VNA

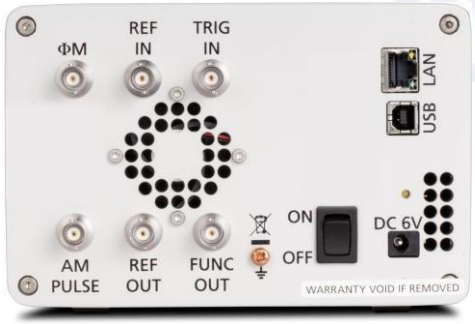
P937x series / P5000A series

S-Parameter	:	2-port, 50 Ω
Frequency	:	
		9 kHz to 4.5/6.5/9/14/20 GHz *
		100 kHz to 26.5/32/44/53 GHz *
Connector	:	3.5mm
Source power	:	-50 to +13 dBm *
Sweep point	:	100,000 points *
Option	:	TDR, AFR, Scalar cal
Calibration	:	ECal, mechanic cal
Controller	:	External PC
Interface	:	USB 3.0 or Thunderbolt

Signal Generator

AP500xA





Pattern	:	Analog (RF and µWave)
Bandwidth	:	9 kHz to 2/4/6.1 GHz 9 kHz to 12/20/26 GHz
Modulation	:	AM/FM/PM, pulse, frequency chrips
Display	:	4.25” touch screen
Connector	:	type-N/SMA
Interface	:	USB/LAN
Code	:	compatible for R&S
Feature	:	Frequency upgradable

Signal Generator

G2 / G3

Pattern	:	Analog (RF and µWave)
Channel	:	1 or 4
Bandwidth	:	300 kHz to 6/12/33/40 GHz 9 kHz to 12/20/40/54 GHz
Modulation	:	AM/FM/PM, pulse,
Sweep	:	Frequency, power, phase
Connector	:	type-N/2.92mm/1.85mm
Interface	:	USB/LAN, GPIB*

Signal Generator

CXG, EXG

Pattern	:	Analog, Vector
Bandwidth	:	9 kHz to 1/3/6 GHz
Modulation	:	AM/FM/PM, Digital * LTE/5G/WiFi/Bluetooth *
ARB Memory	:	
Digital	:	AES3/SPDIF or DSI
Connector	:	type-N
FFT	:	24-bit, 2M points
Interface	:	USB/LAN/GPIB

Power Meter & Power sensor

N191x series / U20xx series / L20xx series , N8400 series

Channels	:	1 or 2 or 3 or 4 ch
Sensor	:	Thermocouple, Diode, etc
Power	:	-70 to +20/+42 dBm
Frequency	:	9 kHz to 18/67 GHz
Display	:	Bench or PC monitor
Video BW	:	5MHz (30MHz*)
Feature	:	Average, Peak
Connector	:	N-type, 3.5mm, waveguide
Analysis	:	CCDF
Interface	:	USB/LAN (GPIB*)

Education (Smart Bench)

EDU series

Digital Oscilloscope

EDU1052A/G : 50MHz, 2-ch

Function generator

EDU33210A : 20MHz, 1/2 ch

Digital Multimeter

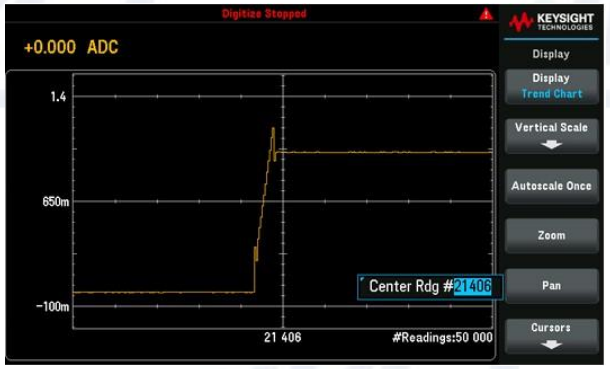
EDU34450A : 5.5 digits

Power supply

EDU36311A : 90W, 3-outputs

Digital Multimeter (Smart Bench Essential)

DM34460A/DM34461A



Display	:	7” Graphical
Digits	:	6 ½
Parameter	:	V(ac,dc), I(ac,dc), freq, Resistance (2W, 4W), Capacitance, Temp
Feature	:	Histogram, trend
Memory	:	50k/2M pts
Speed	:	1k/50k reading/sec
Interface	:	USB/LAN
Code compatible	:	34460A/34461A

Power Supply (Smart Bench Essential)

E36441A

E364SNP Series and Parallel kit

No of output	:	4
Power	:	Up to 400W (160W per ch)
Voltage	:	Up to 32V per ch
Current	:	Up to 10A per ch
Combination	:	128V or 40A
Option (E364SNP)	:	Series/Parallel
Range	:	Auto-ranging
Display	:	7” LCD
Connection	:	remote sense
Function	:	Data log, LIST mode
Interface	:	USB/LAN, Digital port
Code compatible	:	R&S

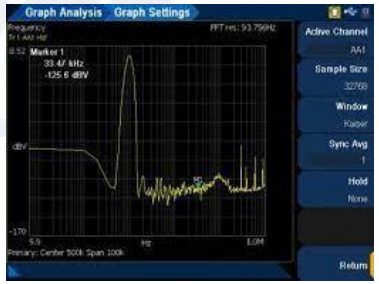
Waveform/Function generator (Smart Bench Essential)

FG33530 series

Channels	:	1 or 2
Bandwidth	:	100 MHz
ARB waveform	:	8 MSa (16MSa)
Display	:	7” Graphical
Waveform type	:	17 types
Modulation type	:	7 types
Feature	:	Memoy upgradeable
Technology	:	Trueform (low THD)
Interface	:	USB/LAN

Audio Analyzer

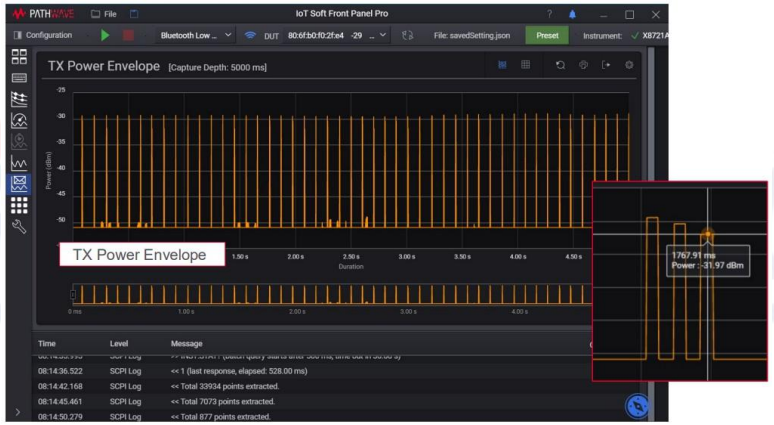
U8903B



Measurement	:	2 (up to 8 ch *)
Generator	:	2 ch
Bandwidth	:	10Hz to 96kHz/1.5MHz*
Wireless	:	Bluetooth 4, BLE
Parameter	:	S/N ratios, SINAD, DFD, IMD, THD ratio, THD+N
Feature	:	POLQA, PESQ
Digital	:	AES3/SPDIF or DSI
Connector	:	XLR, BNC
FFT	:	24-bit, 2M points
Interface	:	USB/LAN/GPIB

IoT wireless test solution

IOT8700 series

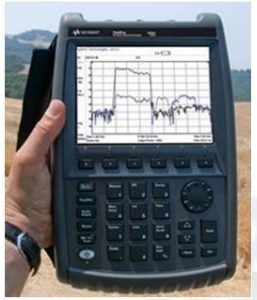


Wireless	:	WLAN / Bluetooth (BLE)
Connection	:	Single / Four
Frequency	:	BLE (2.4 to 2.48 GHz) 802.11 (2.4 to 6 GHz)
Parameter	:	Tx power, PER, status *
Software	:	Free / Pro version *
Enclosure	:	RF shield configurable *
Interface	:	USB/LAN

Pricing : starting from 99X,XXX THB

Fieldfox Handheld Analyzer

N991x/N992x/N993x series



Instrument	:	Cable & Antenna tester, Spectrum Analyzer, Network Analyzer, Power meter, source, etc
Start frequency	:	9kHz/100kHz to..
Max frequency	:	.. 4/6/9/14/18/26/32/44/54GHz
Analysis	:	S-parameter, VSWR, RL, DTF
Protection	:	MIL-PRF-28800F Class 2
Application	:	5G/LTE, TDOA, EMI, TDR, …
Enhancement	:	Real-time spectrum
Option	:	Upgradable [measurement]
Software	:	VSA, Wavejudge, Monitoring
Calibration	:	ECal, cal-ready

d

PXI solution

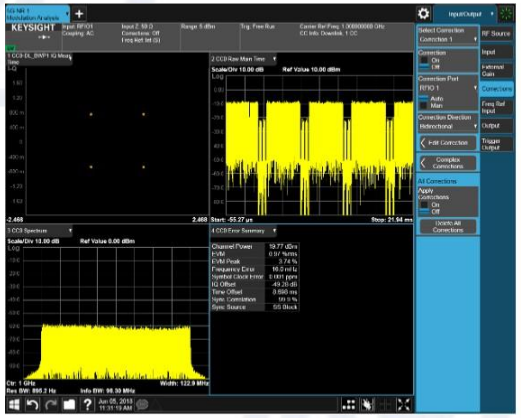
P9000 series

Solution	:	VSCEL, Satellite, RF PA/FEM, Military Radio, 5G/6G Quantum physic
Controller	:	Windows 11, SSD, GPIB

Wireless test set

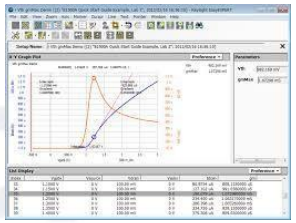
EXM/UXM series

Technologies	:	4G/5G (FR1/FR2), WLAN (5/6/7/7e), Bluetooth, MIMO
Frequency	:	380MHz to 6GHz, up to 43 GHz
Analysis BW	:	up to 160 MHz
Connection	:	1 to 4 DUT per system



Parametric test solution

B1500A/B1506A/B1505A



Max Range : 200V/1A
Min Range : 0.1fA/0.5uV
Measurement mode : IV, CV
Module : HPSMU/HRSMU/MCSMU
CV Mode : Up to 5MHz
Pulse Width : 50us minimum

Max Voltage : 3000V
Max Current : 20A/500A/1500A
Min resolution : 10fA/0.5uV
Application : MOSFET, IGBT
Parameter : Qg/Qgd/Rg, Id-Vds/Ic-Vce,..
Data characterization software

Max Voltage : 10,000V
Max Current : 20A/500A/1500A
Min resolution : 10fA/0.5uV
Application : SiC, GaN, IGBT
Parameter : Qg/Qgd/Rg, Id-Vds/Ic-Vce,..
Customized software for R&D
Support JEDEC standards

Parametric test solution

CX3300/B1500 series

Bandwidth : 50/100/200MHz
Sampling rate : 14-bits (up to 16-bit)
Channels : Analog 2 or 4, Digital 8 (option)
Memory : 4/16/64/256 Mpts (option)
Analysis : FFT, current profiler, CCDF
Current range : 40nA to 1A/10A
Voltage range : 0.02mV to 2.5V/80V

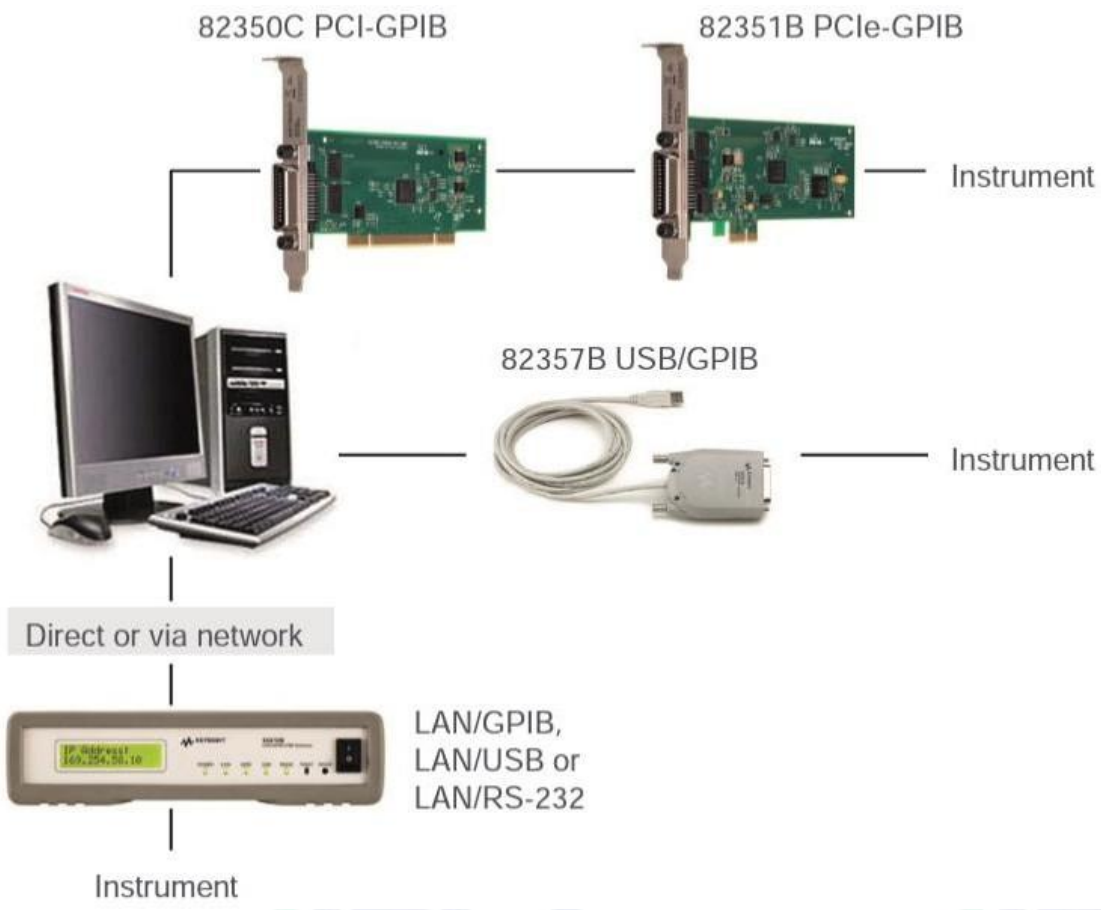
CX1104A

CX1105A

CX1151A

Interface

GPIB + cable series



Interface	:	GPIB, LAN, USB, Serial
Cable	:	0.5/1/2/4 meter

Software

PathWave series

PathWave Vector Signal Analysis Software (89600A VSA)

Advanced Photovoltaic 8-Input Inverter Test Software

HEV/EV/Grid Emulators and Test Systems Software

Oscilloscope Software

PathWave Measurement Analytics Software

Device Characterization Software

Solution

Quantum	5G/6G (Cellular)	Radar, Lidar	Data com, Data center
O-RAN	Electric Vehicle (EV)	WLAN (Wi-Fi)	Electronic warfare
Satellite	Cyber Security	Internet of Thing (IoT/IIoT)	Compliance test (USB-C, PCIe, DDR5)
EMI/EMC	Dielectric Dk/Df	Smart factory (Industry4.0)	C-V2X, ADAS
Silicon photonic	TDR/TDT	Automotive Ethernet	MIMO

INNO INSTRUMENT®

Product Portfolio

SPAW8000
Power Analyzer Wavecorder

SPAW7000
Power Analyzer Wavecorder

SPA6000
High Precision Power Analyzer

SPA5000
High Precision Power Analyzer

SPA4000
Portable Power Analyzer

SPA3200
Digital Power Meter

SPA3100
Digital Power Meter

SPA3000
Digital Power Meter

SPA2000
Digital Power Meter

SPA1000
Digital Power Meter

SBT60/300/1000
Battery Tester

SDR1000
Data Acquisition

SWR9000
Memory Recorder

SCTX/SCTH
Current Sensor

Product Portfolio

Product	No. of Model	Benchtop				Portable
Power Analyzer	5	SPAW8000 (8CH)	SPAW7000 (7CH)	SPA6000 (4CH)	SPA5000 (4CH)	SPA4000 (4CH)
		0.01%, 2000V, 10MS/s	0.01%, 1500V, 2MS/s	0.01%, 1000V, 2MS/s	0.03%, 1000V, 2MS/s	0.03%, 1500V, 2MS/s

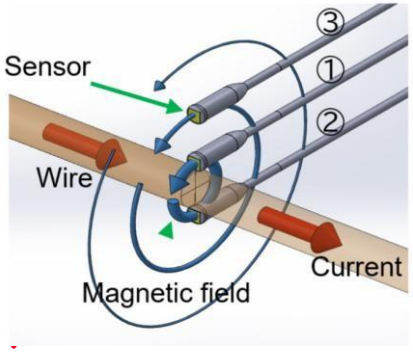
Product	No. of Model	3-Channel			Single-Channel	
Power Meter	5	SPA3200	SPA3100	SPA3000	SPA2000	SPA1000
		1500V, 50A, Touchscreen	1000V, 5A, Touchscreen	1000V, 20A	1000V, 50A	1000V, 20A

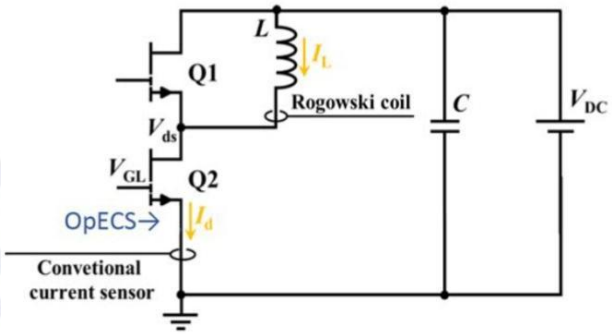
IWATSU

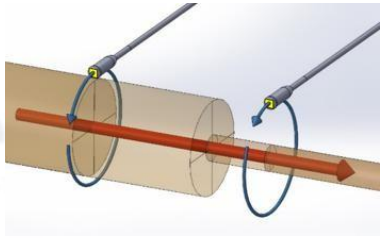
OpECS

Optical probe Electric Current Sensor

- OpECS is an optical probe current sensor that enables current measurement by capturing the magnetic field generated around the current through the Faraday effect
- Ultra-small sensor head (Minimum Φ0.45mm)
- Supports isolation current measurement
- Wide Bandwidth DC ～ 150MHz
- Measurable current ±140A
- Available on oscilloscopes with 50Ω BNC input
- Application
  - Wire bonding current waveform of power device (between source and drain, φ300μm)
  - Double-pulse test of a GaN half-bridge circuit (Vds = 100 V)



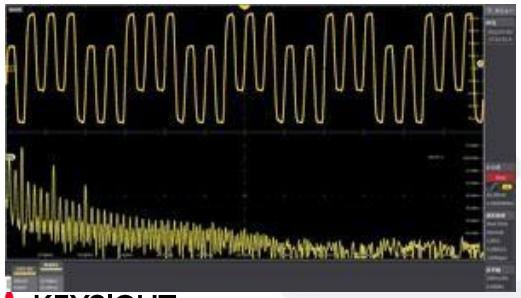




Digital oscilloscope

DS-3000 series

Analog Channels	:	4 or 8
Bandwidth	:	350/500 MHz, 1 GHz
Memory	:	120 Mpts
Display	:	15.6” Full HD
ADC bits	:	12 bits (HR 16 bits)
Interface	:	USB/LAN
Decoding	:	I2C, UART, SPI
Feature	:	8 ch math
Current probe	:	Support, built-in

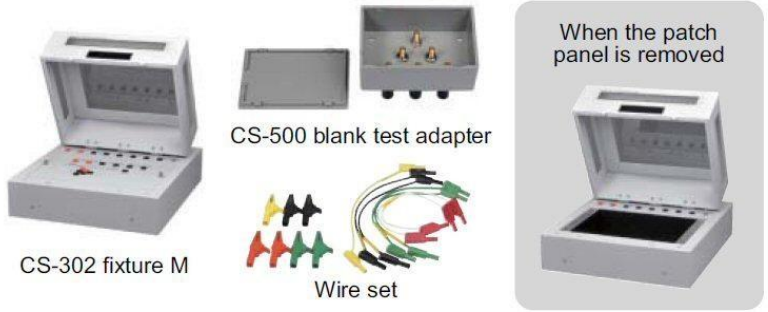


Curve tracer

CS-3000 series

- Maximum peak voltage at 3 kV
- Maximum peak current at 400A / 1000A
- Leakage measurement mode (1 pA resolution)
- Mode : AC, DC, Full wave rectify
- Pulse width : 0.05 to 0.4 msec (0.01 msec)
- Vth-hFE auto search function
- Time domain waveform for pulse mode
- Application : MOSFET, IGBT, Transistor, Diode

Standard accessories for CS-3200 and CS-3300



CS-501A TO-220/247	**CS-502** AXIAL	**CS-503** TO-263-3/ D2PAK	**CS-504** TO-252-3	**CS-505** TO-263-7	**CS-506** TO-252-5	**CS-507** SC-70-3/ SOT-323-3	**CS-509** SC-59A/ SOT-23-3	**CS-510** SC-62/ SOT-89

Current probe

Rogowski coil SS-280A/SS620

Peak current (A)	:	120/300/600/1200/3k/6k
Bandwidth	:	10Hz to 30/100MHz
Temperature	:	up to 70 degree
Withstanding	:	1.2 kV peak
Feature	:	Zero adjustment
Power	:	Alkaline battery

Broadband Current probe *SS-500 series*

Current range	:	5/30/150/500 Arms
Bandwidth	:	100/50/10/2 MHz
Type	:	AC/DC
Feature	:	Zero adjustment
Power	:	External power supply

High voltage

Differential probe

High Voltage Differential Probes – BumbleBee® Series

- Ideal for switching power supplies & GaN / SiC power devices
- NEW: Six new models for different voltage classes
- ±200V, ±400V, ±1000V to ±2000V
  Differential & common mode input voltage
- Each with four user selectable Input attenuator ranges
- Up to 500MHz bandwidth
- Remote control with power supplies PS02/03
- Up to 7m cable length for reaching
  test points far away
- Wide selection of connectivity options
  & accessories
- Universal BNC interface – Use with any
  oscilloscope

Accessories

Voltage probe (Isolation, HV, differential)

positioner

SAFRAN

GNSS Simulator

GPS / GNSS

Sub-Nanosecond Synchronization

White Rabbit ZEN TP-32BNC

White Rabbit LEN

Scientific application

Local Oscillator Distributor (LOD)

Timing board / Navigation

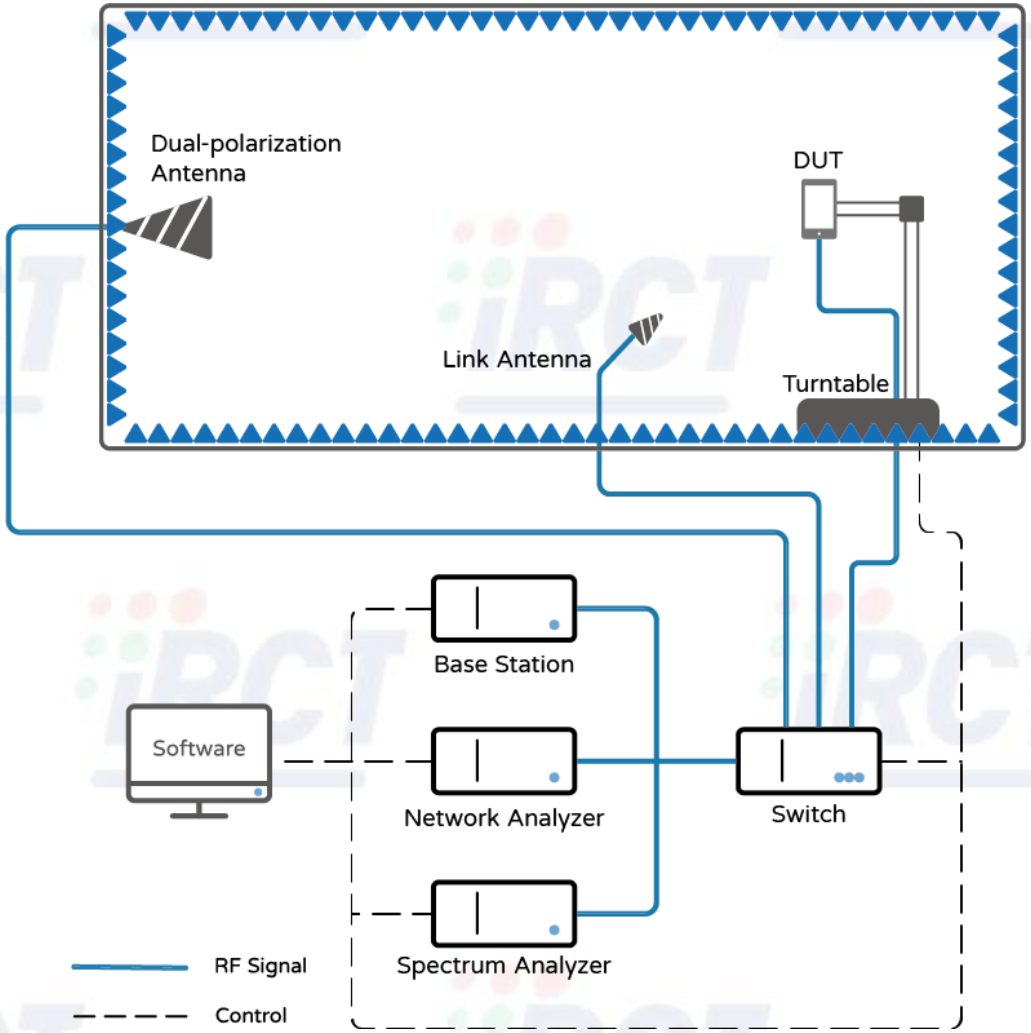
Atomic Reference Time (ART) Card

Geonyx™ Inertial Navigation System

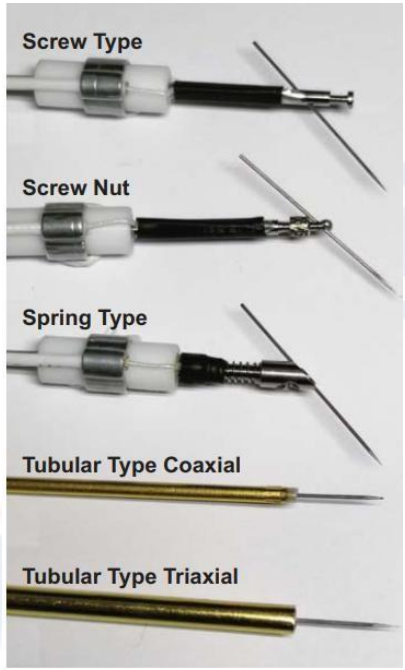
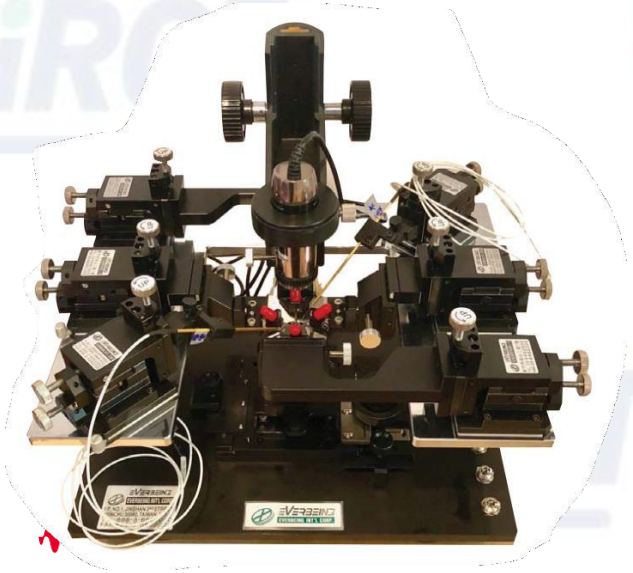
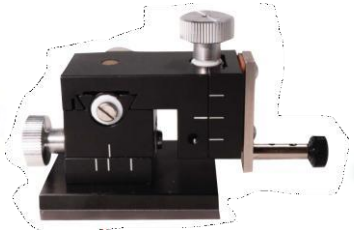
atenlab

atenlab

Antenna Measurement System



Probe station

6”/8” wafer – DC/RF

Tungsten probe / Kelvin probe