



Integrated Services and Consultancy (ISC), an ESA Group Company, is a leading provider of electronic test and measuring instruments since 1993. ISC, a premier distributor partner of Good Will Instrument, GW INSTEK, has been providing high precision electrical Test & Measuring Instruments with optimal TCO - Total Cost of Ownership. Our testing solutions help engineers expertly keep pace with disruption and succeed with innovation in fast growing sectors as in Automotive, IIoT, Semiconductor, Power and many others.

## DC POWER SUPPLIES



**GSM-20H10**  
Precision source measure unit  
4 quadrant operation of  
210V/±1.05A/22W



**PSW-Multi Series**  
Dual-channel/Triple-channel  
programmable switching  
DC power supply



**GPP-3060/6030/3650**  
Triple-Channel Programmable  
DC Power Supply



**PSU-Series**  
Programmable Switching  
DC Power Supply

*Sample Rate: 5GSa/s; Memory Depth: 200Mpts/CH*

## GDS - 3000A Series

650/350MHz DSO, 16 Channel Logic Analyzer

One Oscilloscope with Time Domain, Frequency Domain and Power Measurement



MADE TO MEASURE: GWINSTEK high performance test solutions includes over 300 products across five keylines—Oscilloscopes, Spectrum Analyzers, Signal Sources, AC / DC Power Supplies, DC Electronic Loads, Digital Multimeters, LCR Meters, Safety Testers, Other Meters, and Accessories.



**GPT-12000 Series**  
AC/DC/IR/GB Intelligent  
Safety Analyzer  
Analyze Your Safety Tests



**LCR-8200 Series**  
High-Frequency LCR Meter  
The Smarter Way to  
Characterize Component



**PEL-5000G Series**  
Programmable DC Electronic Load  
High Current Capacity with High  
Resolution can be Perfectly Fulfilled



**ASR-3000 Series**  
Programmable AC/DC  
Power Source  
Uninterrupted AC+DC Transition



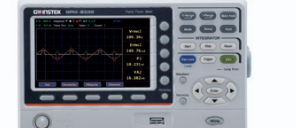
**MFG-2000 Series**  
Multi-Channel Function  
Generator



**GLC 10000**  
Leakage Current Tester



**GDM-906X Series**  
Dual Measurement Multimeter  
Measurement Explores~Insight  
and Efficiency



**GPM-8330/8320**  
Digital Power Meter  
Industrial Three-Phase AC Power  
Measurement



**LATEST PRODUCTS**

**GBM-3000 Series**  
Battery Meter



Voltage (1000/300/80V) & Internal resistance (0mΩ~ 3.2kΩ), Resolution: 10μV and 0.1μΩ, Speed 60 time/s

**ASR-6000 Series**  
High Performance AC/DC Power Source



ASR-6450 AC / DC 4.5kVA & ASR-6600 AC / DC 6kVA  
10 Perfect Output Modes, Dual Current Convergence

**PSW-Multi Series**  
two-channel/three-channel programmable switching DC power supply



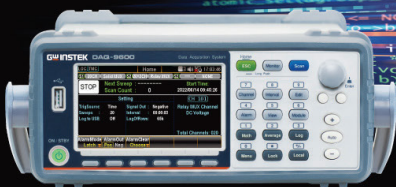
720W Dual channel and 1080W Triple channel, Multiple Voltage Combination (30V/40V/80V/160V)

**PEL-5000G Series**  
4~6kW, up to 1200V DC Load (4U High)



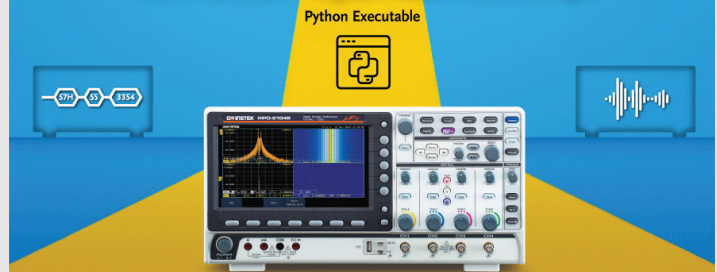
150V/600V/1200V 8 units in parallel for 48kW max. power, Built-in tests for Battery Discharge, BMS, Short circuit, OCP, OPP test modes

**DAQ-9600**  
Data Acquisition System



450 channel/s Scan Rate - Temperature, DC/AC volts/current; Resistance, Capacitance; Frequency, Direct/Bridge Strain

**MPO-2000 Series**  
Multi-function Programmable Oscilloscope



DSO, Spectrum analyzer, Arbitrary waveform generator  
Digital multimeter, DC power supply

Acute Technology Inc., product lineup includes the TravelScope digital storage oscilloscope, TravelLogic logic analyzer, BusFinder eMMC, SD, MIPI D-PHY Protocol Analyzer, LA4000 Logic Analyzer, DG4000/TraveData Digital Pattern Generator, ADP series high-voltage differential probes, TravelBus 2 in 1 analyzer, and MSO2000/3000 Mixed Signal Oscilloscope.

**Compact and light weight, they are designed for convenient portability, aiming to provide customers with convenient and efficient solutions.**



**MSO3124V  
MIXED SIGNAL OSCILLOSCOPE**  
MSO3000 Mixed Signal Oscilloscope

- DSO: 4 Channels, 1 GS/s S/R, 200 MHz bandwidth
- Logic / Protocol Analyzer: 16 Channels, 2 GS/s Timing Analysis, 250 MHz State Analysis
- Data Logger (HDD / SSD Storage)
- Total Memory: 4 Gb
- Digital Voltmeter: 3 digits
- Frequency Counter: 5 digits

**6-in-1 Instruments:** DAQ, DSO, DVM, Frequency Counter, Logic Analyzer, Protocol Analyzer



**LA4136B  
LOGIC ANALYZER**  
LA4000 Logic Analyzer

- 136 channels
- 4GHz Timing Analysis / 400MHz State Analysis
- 32Gb Memory
- Logic, State and Protocol triggers
- Stackable with a DSO to form an MSO

\*TravelBus, TravelLogic

**Ideal for applications requiring high-speed timing analysis or dealing with complex state analysis**



**BF7264 PRO  
PROTOCOL ANALYZER**  
BusFinder Protocol Analyzer

- Real-time data display, post-capture waveform
- Trigger for commands or data
- 64 channels Logic Analyzer
- 32Gb total memory Protocol Analyzer
- Protocol Option: eDP1.4a, eMMC 5.1, MIPI D-PHY 1.2, NAND Flash, SD 3.0(SDIO 3.0), SD 4.1 (UHS-II), SGMII, UFS2.1



**TS3124V DSO**  
TravelScope DSO

- Record length: 128Mpts/ch
- Channel: 4
- Sample rate: 1 GS/s
- Bandwidth: 200 MHz
- Data Logger (HDD / SSD Storage)
- Digital Voltmeter: 3 digits
- Frequency Counter: 5 digits

## PROTOCOL ANALYZER

BiSS-C	I2S	PMBus	SMBus
CAN2.0B/CAN FD	LIN2.2	Profibus	SPI
DALI	MDIO	PWM	SVID
DP_Aux	MII	RGMII	UART (RS232)
eSPI	MIPI I3C 1.1	RMII	USB PD 3
HID over I2C	MIPI RFFE 3	RS-232	USB1.1
I2C	Modbus	RS-482	

## ETHERNET

10BASE-T1S, MII/RMII/RGMII/GMII/SGMII

## ADP5100-B HI-VOLTAGE DIFF. PROBE ; BATTERY

### Hi-voltage Diff. Probe

- Powered by Battery
- Bandwidth : 100MHz
- Bandwidth limit : 5MHz / Full
- Over-range indicator
- Over-range alarm
- Double-layer probe cable for power insulation
- EC conformity : EN 61010-031:2002 +A1:2008
- Works for any grounded DSO with an BNC port



## Protocol Analyzer

- Show real-time protocol data.
- Application timing: massive protocol data with some idles in between.



## Protocol Logger

- Like data logger, save massive data into SSD hard drive.
- Application timing: massive protocol data.



## Protocol Monitor

- Like dash cameras, record protocol data by the device's memory only.
- Application timing: trigger event only happens in very long time.





# Innovation that solves your Bluetooth® Test Challenges

- CS RF PHY & Part H CS Layer Tests
- HDT & higher bands ready
- BLE/Classic/802.15.4 RF PHY Tests
- Smallest, lowest power sniffer
- Bespoke protocols on request
- Production & Development Options
- Android sniffer/coverage app
- LE Audio latency measurements
- Runs in Windows, MacOS & Linux
- Configurable GUI & API
- Bespoke protocols on request
- Perpetual SW Licenses - no OPEX

mini-m<sup>o</sup>reph.



- World's smallest USB powered Protocol Analyser
- BR/EDR, BLE, Qualcomm QBHSL, MediaTek mHDTV2.0, IEEE 802.15.4, LE Audio and CS (Single/Dual/+++ options)
- Simultaneous RX & TX over the entire 2.4 GHz ISM band
- Live or post-capture decryption with blueSPY GUI
- 16 channel Logic Analysis & WiFi Packet Timing
- Custom 2.4 GHz PHYs available upon request

m<sup>o</sup>rephE.



- Specifically designed for PHY Layer Testing
- Options for BR/EDR, BLE, QBHSL, IEEE 802.15.4
- RF Spectrum Record and Playback option - 3 hrs 40 mins
- C/I, blocking & intermodulation signals generated internally
- Accurate power control to -115dBm for coded PHY tests
- Full support for in-band emissions
- Production Line or Development options available

m<sup>o</sup>rephcs.  
channel sounding



- Support for all CS RF-PHY test cases, including BT=2.0 modulation index & CS Layer tests via HCI
- Simple control via comprehensive GUI or Python/C++ dll.
- Log of all HCI traffic and key events
- Export of raw IQ data, spectrogram or the entire capture
- Capture of GPIO time aligned with IQ data
- Production Line or Development options available

pod.  
audio



- Audio latency measured end-to-end, between-channels or relative to on-air packets in real-time
- Audio capture and generation accurately timestamped relative to Bluetooth packets
- Measures LE Audio Presentation Delay
- Measures SYNC between Left and Right channels

**Mi-BEAM**  
MODULAR INTELLIGENT-BIDIRECTIONAL ENERGY AMPLIFIED



**Sorensen**<sup>™</sup>

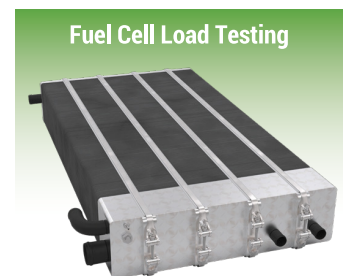
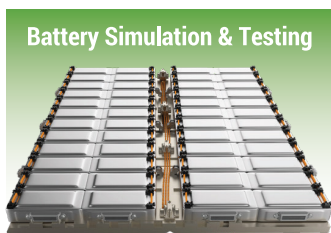
Power (kW)	12kW	25kW	37kW
<b>Voltage (V)</b>	<b>Maximum Current (A)</b>		
600	50	100	150
1500	–	50	50
2000	–	50	50

\*Global pricing for base units without options, Incoterms Ex Works (EXW) San Diego, California, USA.

**High Performance, Modular Bidirectional, Regenerative Programmable DC Power System**

- Full DC source and sink capabilities with power levels from 12 kW up to 37 kW
- Fully scalable up to 1.2 MW with parallel systems
- Available voltage ranges of 600V, 1,500V and 2,000VDC in a 4U rack chassis providing full power up to +/-150A within a single system.

The Mi-BEAM Series is designed for testing today’s complex, high power electronics for the automotive, energy storage, industrial, and aerospace markets in a variety of applications. This platform covers all test needs through the product life cycle from advance research and development (R&D), to design validation, and production test requirements.



**Asterion**

**California Instruments**<sup>™</sup>

**High Performance Programmable AC / DC Power Source**



**Asterion AC Series Advanced Features**

- High power density in 1U / 2U / 4U / 14U chassis up to 18kVA
- Auto paralleling for higher power
- Voltage: 0-400VAC/0- 500VDC, Current: 0-60Arms/phase, Power: 500VA - 36000VA
- Complete avionic test suites (optional)
- Standard LXI LAN, USB and RS232, optional GPIB

**Asterion AC Series Advanced Features**

- Commercial and military avionics test
- AC power simulation
- Frequency & voltage conversion
- IEC standards testing



## High Performance Solar Array Simulation Power Supply



- ▶ 2 independent, isolated 600W channels or 1 1200W channel in 1U
- ▶ Voltage: 40 V to 220 V
- ▶ Current: 2.72A to 20A
- ▶ 2 $\mu$  second shunt switching recovery
- ▶ Peak Power Tracking
- ▶ Primary and secondary over voltage and over current
- ▶ Output electronic circuit breaker
- ▶ Built in fault data recorder
- ▶ Power On Self-Test
- ▶ Active power factor correction (PFC)
- ▶ Color touch panel monitoring
- ▶ Standard LAN interface
- ▶ Full remote control via AMETEK SAS software or SCPI commands

Example of a fully integrated Solar Array Simulator

30 channel  
600W/ch  
18KW total



## SEQUOIA SERIES

California Instruments™

### PRECISION PROGRAMMABLE REGENERATIVE GRID SIMULATORS FEATURES AND CAPABILITIES

- ▶ 0 - 333VAC, 0 - 3.000A / PHASE 15KVA - 1.08MVA
- ▶ Single Solution for: AC/DC Programmable Power Source, AC/DC Grid Simulator, AC/DC Resistive or Complex Electronic Load
- ▶ Dual Voltage ranges that support over voltage testing on 480V based systems
- ▶ 500uS time resolution for Transients
- ▶ Virtual Panels control software included
- ▶ Non-Linear current waveform programming during Load mode
- ▶ Phase coordination among multiple units (LKM/LKS)
- ▶ Powerful set of analog controls for PHIL and Modulation tests
- ▶ Trigger In & Out to permit extensive coordination with external systems
- ▶ Extensive Onboard diagnostics
- ▶ Digital I/O, including RS232, USB, Ethernet (GPIB optional)
- ▶ Auto-paralleling for maximum flexibility with multi-chassis configurations





Elektro-Automatik

## MOST COMPREHENSIVE PROGRAMMABLE POWER SOLUTIONS

The EA-10000 series includes more than 180 devices: programmable DC power supplies EA-PS & EA-PSI, bidirectional DC power supplies EA-PSB & regenerative electronic DC loads EA-ELR.

All series come in power form factors of 2U, 3U and 4U



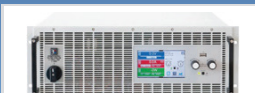
### EA-PSB 10000 2U

- 1.5 kW and 3 kW
- Up to 750Vdc & up to 120 Adc
- Parallel up to 192 kW



### ELR 10000 4U

- Power 30 kW
- 0 - 80 V up to 0 - 2000 V
- 0 - 40 A up to 0 - 1000 A



### EA-PSB 10000 4U

- 15 kW to 30 kW
- Up to 2,000Vdc
- Parallel up to 1.92 MW

## ATE TESTING SOLUTIONS

### EA Advantages

- High power Density
- Output voltage up to 2000V
- Power output up to 30 kW
- Paralleling up to 2MW
- High efficiency up to 96%
- Autoranging
- Arbitrary waveform and function generator
- Digital control, Anybus
- Low EMC



Programmable DC Power Supplies



Programmable DC Electronic Loads (Conventional and regenerative)

### INTERFACES, PORTS / SOFTWARE

- **Extensive portfolio of interfaces:** Analog, USB, CAN, CANopen, DeviceNet, RS232, EtherCAT, Ethernet 1 and 2 port, Profinet 1 and 2 port, Modbus 1 and 2 port, Profibus, USB-Host
- **Operating software EA-Power Control:** Monitor and control up to 20 devices simultaneously. Set and actual values in one graphic
- **Software EA-Battery Simulator:** Simulates Li-Ion and lead batteries

## Reliable, Precise & Efficient Power Supplies for ATE Systems

### EA- 10000 SERIES

Wide range of improved DC power supplies and electronic loads

#### EA POWER RACKS

- 19" cabinet system with up to 1.92 MW
- Systems with programmable laboratory power supplies, electronic loads with energy recovering and bidirectional laboratory power supplies
- Optionally available: Emergency stop (machine standards EN60204-1) Grid monitor (ENS) and insulation monitor Stainless steel water cooling Copper busbar for DC output
- Special construction for various applications

Laboratory Power Supply & Electronic Load  
EA-PSB 10000, EA-PSI 10000, EA-ELR 10000



Air-cooled

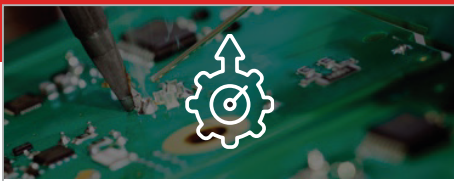


Water-cooled



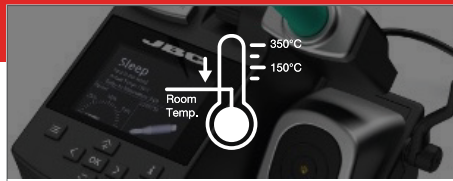
Up to 1.92MW in a rack system





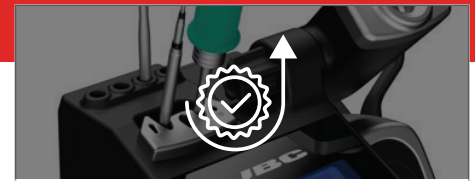
## HEATING SYSTEM

JBC provides the Most Efficient Soldering System which leads to quality improvement & an efficiency increase.



## HEAT MANAGEMENT

Thanks to both Sleep & Hibernation Modes, tip life increase exponentially.

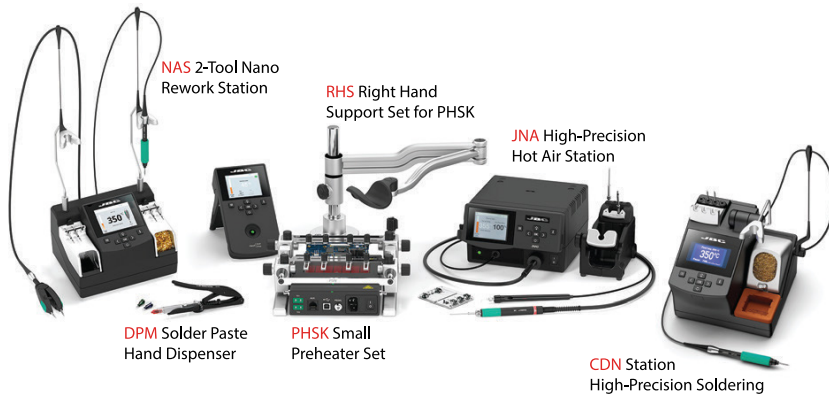


## INCREASE PRODUCTIVITY

Use Quick Cartridge Extractor to change quickly & safely without switching the station off.

### High Precision

## NANO REWORK SOLUTIONS



NAS 2-Tool Nano Rework Station

RHS Right Hand Support Set for PHSK

JNA High-Precision Hot Air Station

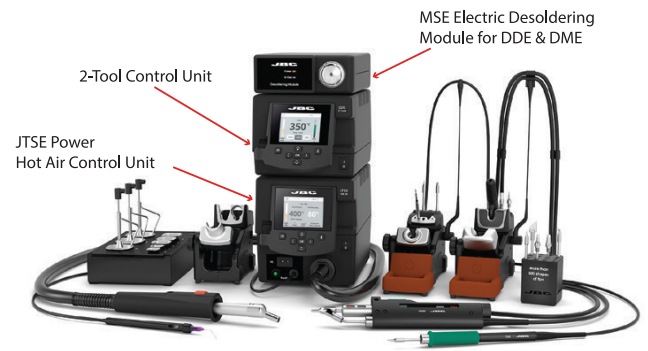
DPM Solder Paste Hand Dispenser

PHSK Small Preheater Set

CDN Station High-Precision Soldering

### High Power

## RMSE COMPLETE REWORK STATION



2-Tool Control Unit

JTSE Power Hot Air Control Unit

MSE Electric Desoldering Module for DDE & DME

## SMD Rework System

The ideal solution for your entire rework tasks.

Includes Hot Air Station, Preheater with PCB Support, and Rework Arm.

## JBC Preheater Range

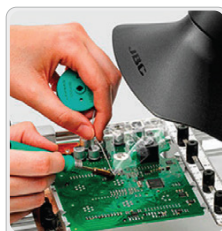
For rework on multi-layered PCBAs and/or large ground planes in order to avoid thermal shock and facilitate soldering as well as desoldering processes.

## ADJUSTABLE TWEEZERS RANGE

Provide the highest precision when soldering or reworking SMD components.



Preheaters



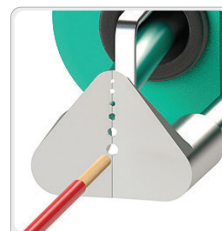
Fume Extractors



Tip Cleaners



Auto Feeder



Wire Stripper



Automation

## BGA/SMT REWORK STATIONS

PDR designs, manufactures, and distributes IR Rework Stations, Industrial X-Ray Inspections Systems, and IR Thermal Test equipment for the electronics component and PCB assembly industry.

PDR isn't just a brand, it's a revolution delivering unmatched control and effortless execution.

At the forefront of SMD rework technologies, PDR are working with many of the world's top names in:

- Electronic Manufacturing
- Defence
- Automotive
- Medical
- Research & Development



## PDR IR-E3

- Advanced Focused IR component heating
- Quartz IR PCB preheating with up to 3 zones
- Split Beam prism system for simultaneous PCB/component viewing
- Precision Components Pick & Placement up to 10um
- Precision PCB handling
- Component Nest/Flux Application Facility
- Closed Loop Non-Contact Temperature Sensing
- Advanced Automatic Thermal Process Control
- Reflow Process Observation Camera
- PCB Forced Air Cooling

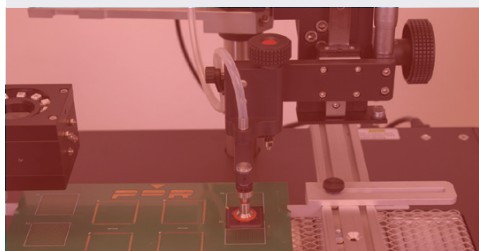
## FOCUSED INFRARED

What you see you heat.  
No collateral damage.  
Instantaneous control.



## PLACEMENT TECHNOLOGY

Our placement technology  
allows every operator to achieve  
the same standard of quality.



## INTELLIGENT SOFTWARE

One profile to rework nearly all  
applications.





## ULTRA HIGH-PERFORMANCE HIGH RESOLUTION IMAGE QUALITY COMPACT X-RAY SYSTEMS

Founded in 1998, PDR Xray Systems has become a world leader in providing high quality industrial X-Ray solutions to specifically address the needs of the Semiconductor, PCBA, Medical Device, Government, and NDT communities.

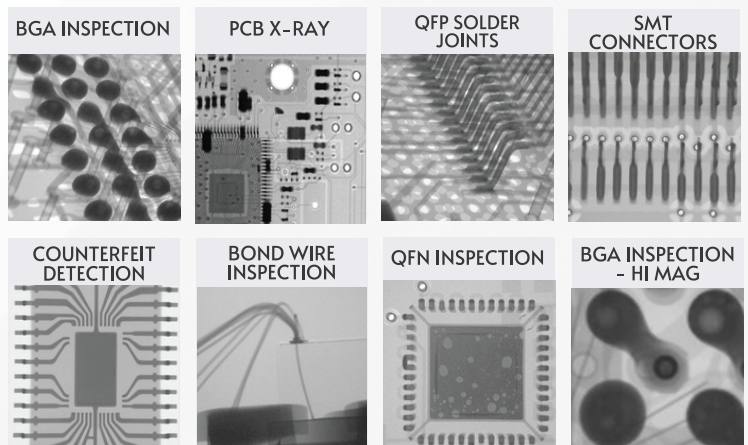
Noted for high image quality and affordability, PDR XRAY Systems is the product of Engineering Teams formerly associated with GenRad, Teradyne, and Nicolet Xray Imaging Systems. This overarching expertise in the field of X-ray technologies has led to the development of superior performance PXI technology that forms the backbone of each PDR X-Ray system.

PDR's 90kV X-ray and 130kV X-ray systems are engineered with high-quality materials and craftsmanship and X-ray safety standards exceeding the most stringent requirements for industrial safety. All X-ray non-destructive inspection systems built by PDR are equipped with a suite of X-ray image processing tools and features that incorporate cutting-edge technologies to insure that your X-ray system delivers quality X-ray images and the power of analytic tools required for a successful X-ray program.



## PDR GENX-130P

- BGA Inspection/Analysis
- Counterfeit Inspection
- Porosity/Voiding Detection
- Medical Device Inspection
- Wire Bond Inspection
- LED Inspection
- Less Than 1  $\mu\text{Sv/hr}$  (0.1 mR/hr)  
USFDA 21 CFR-I, J-1000, 1020.40



# OPTICAL INSPECTION SYSTEMS

## Eye-piece-less Stereo 3D Microscopes

### MANTIS



**3 - 15x**  
Magnification

**Ergonomic**  
Working

**Digital**  
Image Capture



5MP image quality



Long working distance



Ergonomic position



3D view



Overlay & Image comparison



Import, export settings



Glasses free



Outstanding image quality



3D illumination

### LYNX EVO



**2.7 - 240x**  
Magnification

**Easy**  
Viewing

**HD**  
Image Capture



360 viewer



WiFi



focus stacking



high precision stage

# DIGITAL INSPECTION SYSTEMS

## 2D Digital Inspection Systems

### MAKROLITE 4K



**3x - 330x**  
Magnification

**Wide Dynamic Range**  
Improved contrast

**Ultra HD**  
Exceptional resolution

### EVO CAM II



**0.8 - 750x**  
Magnification

**Large**  
Field of View

**PC**  
control option

### VE CAM



**Wi-Fi**  
Screen sharing

**Wide**  
Field of View

**Touch screen**  
Compatible

# DIGITAL INSPECTION SYSTEMS

## 3D Digital Inspection Systems

### DRV-Z1



**6.1 - 93x**  
Magnification

**Easy 3D**  
Digital View

**Share**  
Live 3D View



MULTI-FUNCTION METER



INSULATION RESISTANCE METER



EARTH RESISTANCE & RESISTIVITY METERS



POWER QUALITY ANALYZER



FAULT LOOP IMPEDANCE METER



RCD METER



PAT - TESTER



MICRO OHM METER



THERMAL IMAGER CAMARA



CORONA CAMERA



CABLE LOCATORS



PHOTOVOLTAIC METERS



VOLTAGE & PHASE ROTATION TESTER



MULTIMETER & CLAMP METER



LUX-METER



HIPOT / VLF

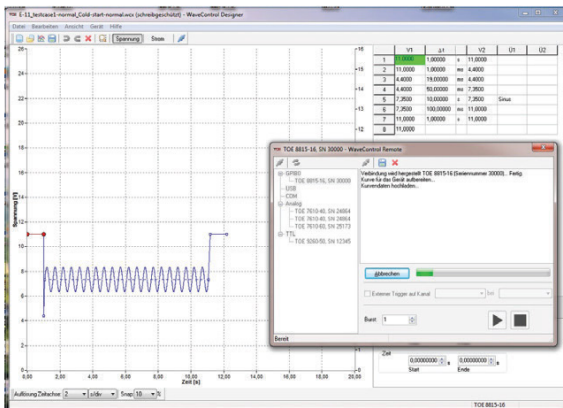


## DC and Arbitrary Power Supplies Arbitrary & Function Generators 4-Quadrant and Broadband Amplifiers Special Instruments

### Comprehensive Test Bench For Automotive Testing

TOELLNER offers flexible solutions for on-board network simulation and testing of components, e.g. for the automotive and avionics industries. The Software WaveControl provides waveforms and controls the TOELLNER system components at the test station, which can be individually tailored to your requirements. Using a DAQ-Card, any signal waveform can be provided with Arbitrary Power Supplies or 4-Quadrant Amplifiers with outputs from 160 W to 5200 W. For fast interruptions, TOELLNER offers electronic switches with switching times below 500 ns.

WaveControl Software includes a comprehensive library of waveforms supporting these standardized automotive industry tests:



The Software WaveControl provides

✓ **Extensive Waveform Libraries for Normative Tests, e.g.**

- LV 124, LV 148
- VDA 320
- VW 80000-1
- VW 82148
- GMW 3172
- MBN 10615
- ISO 16750-2
- BMW GS 95024-2-1
- BMW GS 95026

- ✓ Import & Export of recorded Data
- ✓ Visual Generation of individual Waveforms
- ✓ Sequence Controlling and Timing



- Electronic Switch for short interruptions up to 60V / 100A; tr / tf < 500 ns
- 4-Quadrant-Power-Supply up to  $\pm 100$  V /  $\pm 40$ A; > 100 kHz, 320W / 1kW, modularly expandable up to 6,4 kW / 20 kW
- Arbitrary Power Supply up to 100 V / 320 A, AC-superimposition up to 70 kHz, 320 W / 1 kW up to 5.2 kW / 16 kW
- Software to create arbitrary waveforms, an extensive library of normative waveforms included
- All instruments can also be used individually

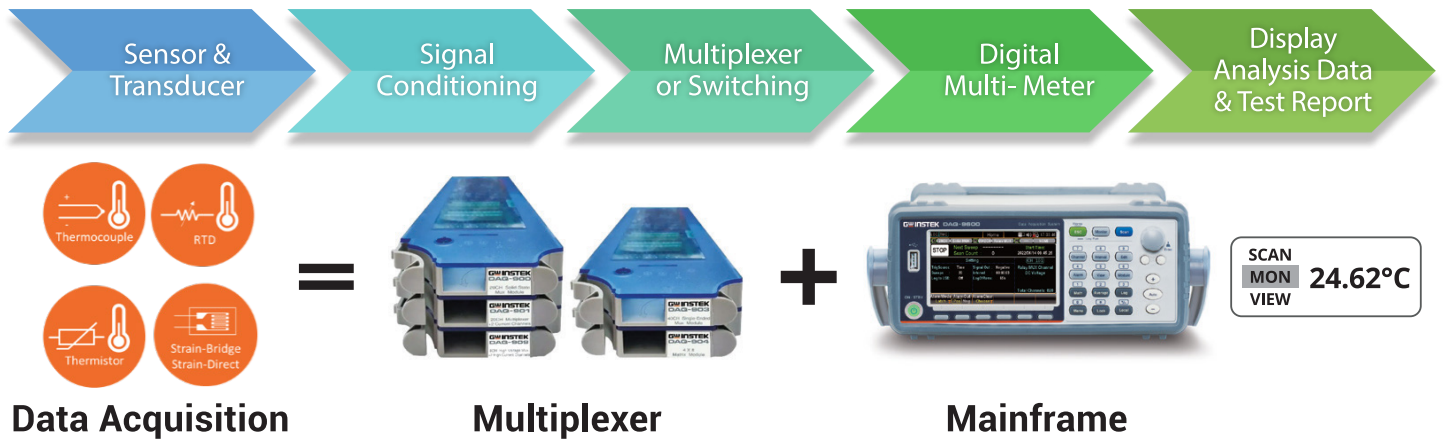


## GWInstek Data Acquisition Systems



### FEATURES

- Large 4.3" TFT color display
- 3-slot mainframes with built-in 6 ½ digit DMM
- Basic 0.0035% DCV accuracy
- 5 selectable switch modules
- Up to DC 600V / AC 400V voltage measurement (DAQ-909 module)
- Up to 450 channel/s scan rate
- Up to 100 kilo points internal memory
- Measures and converts 14 different input signals:
  - Temperature with thermocouple, RTDs and thermistor; dc/ac volts; 2- and 4-wire resistance; frequency and period; dc/ac current and capacitance; direct strain and bridge strain
- USB storage support to copy/log data in standalone operation
- Interface: Digit I/O, LAN, USB host/device and mini GPIB(optional)



	Thermocouple	RTD	Thermistor	AC Voltage	DC Voltage	AC Current	DC Current
<b>Range</b>	-200 °C to 1820 °C	-200 °C to 600 °C	80 °C to 150 °C	100mV to 300V	100mV to 600V	100µA to 2A	1µA to 24
<b>Resolution</b>	0.002 °C to 0.01 °C	0.002 °C	0.01 °C	0.1µV to 1mV	0.1µV to 1mV	1000A to 1µA	1PA to 1µA
<b>Accuracy</b>	0.2 °C	0.06 °C	0.01 °C	0.05%	0.0035%	0.10%	0.05%

	2W Resistance	4W Resistance	Capacitor	Frequency Period	Strain-Bridge Strain-Direct
<b>Range</b>	100 Ω to 1000 MΩ	100 Ω to 1000 MΩ	1nF to 100µF	3Hz to 300kHz	
<b>Resolution</b>	0.1 m2 to 1000 Ω	0.1 mo to 1000 Ω	0.0001nF to 0.01µF		
<b>Accuracy</b>	0.01%	0.01%	2%		



[www.esaindia.com](http://www.esaindia.com)

**Battery Simulation, Battery Testing (Charge/Discharge)**  
**Battery Internal Resistance & Battery Health Monitoring, BMS Testing**  
**Electric Power Train Testing, LV 123 , LV 124/LV 148, ISO 16750-2**  
**EMC EMI Pre Compliance Testing**  
**Solar Power Simulation & Inverter Testing, Fuel Cell Testing**  
**AC Grid Simulation, AC/DC Charging Station & OBC Testing**  
**Power Quality Testing, Electrical Safety Testing, Thermal Imaging**  
**CAN/CAN FD, 10 Base T1-S, I2C, RS-232/482, Modbus, Profibus, SMBus**  
**Data Logging & Analysis, Optical & Digital Inspection**

**BANGALORE**

Mr. Santanu Chatterjee  
**DGM-Sales**  
M: +91 97313 78934  
T: 080-6764 8888 Ext:12  
080-23126100/200  
E(Sales): sales@isc4esaindia.com  
E(Support): support@isc4esaindia.com  
service@isc4esaindia.com

Registered Office  
"Embedded Home", #37, II Floor,  
36th Cross, II Block, Rajajinagar,  
Bengaluru-560010. Karnataka, India

**CHENNAI**

Mr. Senthil Kumar  
**Manager-Sales**  
No.109 /59A , Ground Floor,  
IV Avenue, Ashok Nagar,  
Chennai - 600 083  
Tamilnadu.  
T: 044-24715750  
M: +91 75500 76300  
E: chennai@isc4esaindia.com

**HYDERABAD**

Mr. A V Gopalakrishna  
**Sr Engineer Sales-TMI**  
Manasa Apartments  
Flat Number 3, Plot No 533/3  
H. No 3-5-76/18, Vivekanandanagar  
Colony, Kukatpally,  
Hyderabad- 500 072.  
M: +91 90082 96566  
E: gopala.krishna@isc4esaindia.com

**PUNE**

Mr. Amol kadu  
**Sales Manager-TMI**  
Office No. 302, Vaidehi Saket  
Baner Pashan Link Road,  
Pashan, Pune  
Maharashtra – 411 021  
M: +91 98450 44338  
E: pune@isc4esaindia.com

**DELHI**

Mr. Dharmaveer  
**Sales Manager**  
M: +91 80531 7771

**KOLKATA**

Mr. Arun Roy  
**Manager-Sales**  
M: +91 98305 78843

**VADODARA**

Mr. Jaimin Shah  
**Application Engineer**  
M: +91 73488 51143

**CORPORATE HEAD QUARTERS**

#S 606, 6th floor, World Trade Center  
Brigade Gateway, 26/1, Dr. Rajkumar Road,  
Mallechwaram(W), Bangalore-560055  
Karnataka, India  
T: 080-6764 8888/36  
F: 080-67648841

