

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.

RBS Series

Regenerative Bidirectional DC source



- Complete protection mechanism: including OVP, OCP, OTP and input over-voltage and under-voltage protection.
- Intuitive touch panel human-machine operation interface
- Standard dedicated PC control software
- Interface options: USB, RS-232/RS-485, LAN, CAN or GPIB

The RBS Series regenerative bidirectional DC Source is a versatile, programmable power solution with **both power (source) and load (Sink) capabilities**. Importantly, it can **feed the regenerative energy back into the grid, enhancing energy efficiency**.

- Widely used in the development and production testing of **electric vehicles, energy storage systems**, and related products.
- Capable of simulating battery characteristics in practical applications, including charging and discharging behaviors, to assist with various tests.
- The RBS series has **8 fixed battery models + one custom battery model** [lithium manganate (LMO), lithium cobalt oxide (LCO), lithium iron phosphate (LFP), ternary lithium (NCM), lithium titanate (LTO), lead-acid (Pb), nickel-metal hydride (NiMH), and nickel-cadmium (NiCd) batteries]
- Features built-in SAS (EN50530, Sandia), SAS2, and customizable models. It also supports **static/dynamic MPPT testing** as well as **complex solar irradiation simulations**, such as **cloud shading** and **cloud movement**.
- Ideal for Motor Driver Testing functioning both as a DC power source and as a DC electronic load.

AEL-5000 AC/DC Load

Programmable AC/DC Electronic Load

- CC, Linear CC, CR, CV, CP and AC Rectifier Load Mode
- Frequency Range : DC, 40~440Hz
- Turbo Mode for 2 Times the Current and Power of Electronic Load within 1 Second
- 8 Units Parallel up to 180 kW and Three-phase Δ or Y Load Connection Can be Synchronized Control by One Master Unit
- Loading and Unloading Angle Control; 0~359 Degree is Settable
- Positive Half-cycle or Negative Half-cycle Loading
- Optional Interface : GPIB、RS232、USB、LAN
- Suitable for UPS, Inverter/Breaker, AC Power



1 Unit Power 1875W to 22500W,
8 Units Parallel up to (1 phase) 180 kW
and (3 phase) 540KW, Frequency Range : DC, 40~440Hz

Source, Battery, Fuse/Breaker, DC Power Source and other applications

- Supports SCR/TRIAC Current Phase Modulation Waveforms, 90 Degree Trailing Edge and Leading Edge

PEL-5000G Series

Programmable DC Electronic Load



Single unit 150/600/1200 V, Power 4-6 KW, 8 units upto 48KW

- Optional PEL-032 load current waveform generator to provide the battery actual discharge current waveform simulation
- 5 digital V / A / W Meter can be displayed on Large LCD display simultaneously
- Flexible CC, CR, CV, CP, CV + CL, CV + PL, Dynamic and short circuit operation modes
- Surge Test mode for Capacitive load for current rising transient test
- Turbo mode can withstand up to 1.5 times the current and power electronic load within 2 sec. period, most fit BMS, Short circuit, OCP, OPP test
- Protection against V, I, W, and
- Optional Interface: GPIB, RS232, USB, LAN
- Provide battery BMS protection test function
- Built-in test modes include Battery Discharge, BMS, Short circuit, OCP, OPP test modes

ASR-6000 Series

High Performance AC/DC Power Source



**1 Unit 4.5/6 kVA (Single/Three-phase)
Parallel Connection Type 36 kVA / 36 kW Max**

- Required by Manufacturers of Server/communication power supplies, On-board chargers, UPS, AC inverters, AC

three-phase motor control, and protection devices

- 10 output modes: including external input signal frequency and mains synchronization (SYNC), external voltage controlled internal amplifier output (VCA)
- AC balanced and unbalanced three-phase, phase loss output functions
- Programmable output impedance adjustment
- AC maximum output phase voltage: 350 Vrms line voltage: 700 Vrms
- Powerful arbitrary waveform editing and output function, capable of editing and outputting tens of thousands of waveforms

PHU Series

Autoranging (Multi-Range) High Power DC Source

- C.C/ C.V priority mode
- Adjustable voltage/current rise and fall time
- AWS (Advanced Web Control)
- Bleeder Control function
- Internal Resistance function
- Protection: OVP, OCP, OHP, UVL, AC Fail, FAN Fail
- Standard: USB, LAN, Isolated Analog control
- Option: RS-232&485 or GPIB or CAN Bus or Device Net or Any Bus
- 3U height and 19" Rack Mount Size
- Enables broad range of testing applications such as photovoltaic systems, electric vehicles (EVs), and automotive electronics



**80 V-1500 V, Max Current: 510 A, Power 5 kW/10 kW/15 kW
10 units in parallel for max 150 kW**

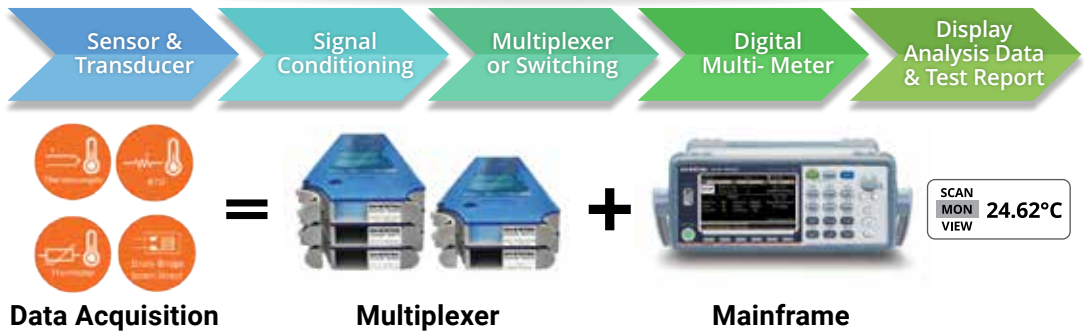
- Offers a variety of optional functions including Datalogger, Capacity/Energy, Solar Array Simulator, and Battery Simulation

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
- 7 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)



Built-In Signal Conditioning, Precise Test and Measurement

Range	-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
Resolution	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
Accuracy	0.2 °C	0.06 °C	0.01 °C	0.05%	0.0035%	0.10%	0.05%

Range	100 Ω to 1000 MΩ	100 Ω to 1000 MΩ	1nF to 100µF	3Hz to 300kHz	
Resolution	0.1 m2 to 1000 Ω	0.1 mo to 1000 Ω	0.0001nF to 0.01µF		
Accuracy	0.01%	0.01%	2%		