

BI-DIRECTIONAL PROGRAMMABLE AC POWER SUPPLY

A2000 SERIES



The A2000 series is a Bi-directional programmable AC power supply featuring high accuracy, high dynamic response, and high efficiency. Adopting the all-new third-generation wide band-gap semiconductor material SiC, the product is highly modularized and standardized, offering industry-leading performance + experience. The A2000 series applies to PV and energy storage, new energy vehicle, AC/DC charging pile industries, as well as testing by research institutes and colleges and universities.

Features

- | Third-generation SiC design
- | Electrically operated switch + TFT touch screen
- | Voltage output range: 0~450V(L-N)
- | Current output range: 0~342A
- | Frequency output range: 40-70Hz
- | Efficiency: up to 92.6%
- | Unbalance, flicker simulation
- | Comm. interface: RS485, LAN
- | External emergency stop
- | Multi-step programming
- | Flexible parallel connection
- | LVRT/HVRT/ZVRT
- | Harmonics and inter-harmonics superposition

Model Selection

Model	Voltage	Current	Power	Dimensions (W*D*H)	Weight
Normal					
A2000NG-45K-450-90	450V	90A	45kVA	620mm*900mm*970mm	270kg
A2000NG-75K-450-114	450V	114A	75kVA	620mm*900mm*970mm	270kg
A2000NG-150K-450-228	450V	228A	150kVA	640mm*900mm*1600mm	505kg
A2000NG-225K-450-342	450V	342A	225kVA	850mm*1000mm*2000mm	765kg
Pro					
A2000PG-45K-450-90	450V	90A	45kVA	620mm*900mm*970mm	270kg
A2000PG-75K-450-114	450V	114A	75kVA	620mm*900mm*970mm	270kg
A2000PG-150K-450-228	450V	228A	150kVA	640mm*900mm*1600mm	505kg
A2000PG-225K-450-342	450V	342A	225kVA	850mm*1000mm*2000mm	765kg

Normal
Fundamental, Cost-effective

Pro
Fully-featured, Multi-scenario

Version	Normal	Pro
Features		
Bi-directional AC power supply	★	★
Voltage Ride-through	★	★
Harmonic & Inter-harmonic Superposition	★	★
Three-phase Unbalance	★	★
Flicker	★	★
AC Load	-	★

Note: "★" means Yes; "-" means not available.

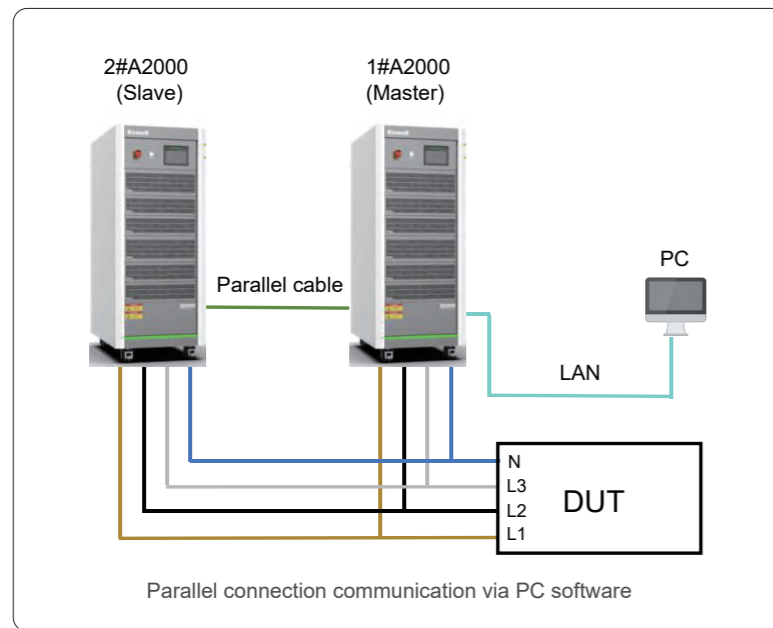
Product Applications

- | Testing AC charging piles
- | Testing ESS (Energy Storage System)
- | Testing power conversion system (PCS)
- | Testing AC-DC converters
- | Testing PV inverters
- | Testing OBC (On-board Chargers)
- | Simulating/Replacing AC power supply and load testing environment

Product Functions

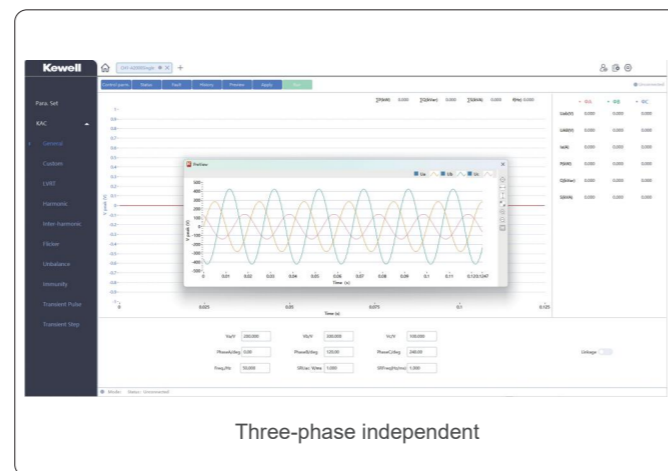
- **Flexible Parallel Connection:**

The parallel connection supports high-speed communication with good anti-interference performance. In the case of parallel connection, one master can control multiple slaves.



- **General Modes:**

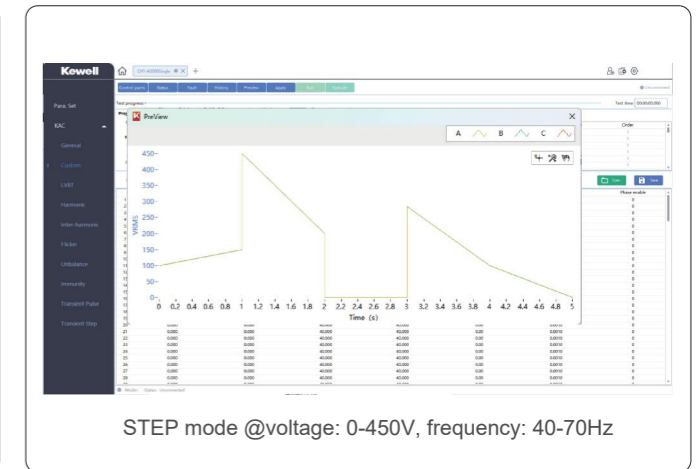
This covers three-phase linkage and three-phase independent operation. It supports independent output of single phase, two phases or three phases, to simulate a variety of unbalanced and abnormal grid conditions.



- **Programming Modes:**

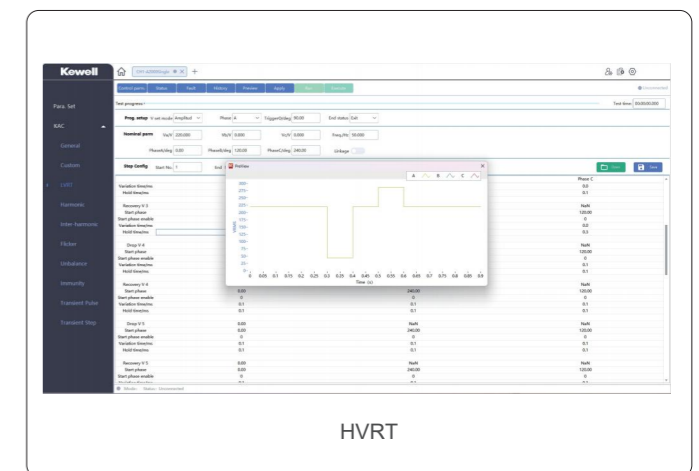
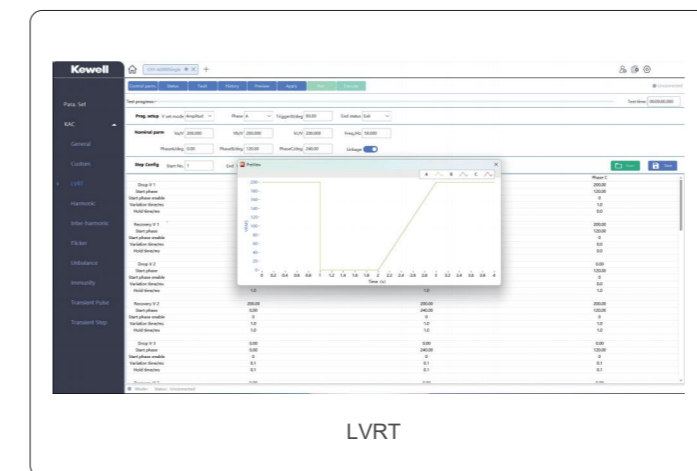
LIST mode supports up to 200 groups of steps to be edited, steps can be set to run in cycle and to simulate complex waveforms such as voltage dips, interruptions and variations.

STEP mode supports single or multi-step voltage variation to simulate power supply disturbances such as cyclic dips, instantaneous high voltage, and gradient voltage drop.



- **Voltage Ride-through:**

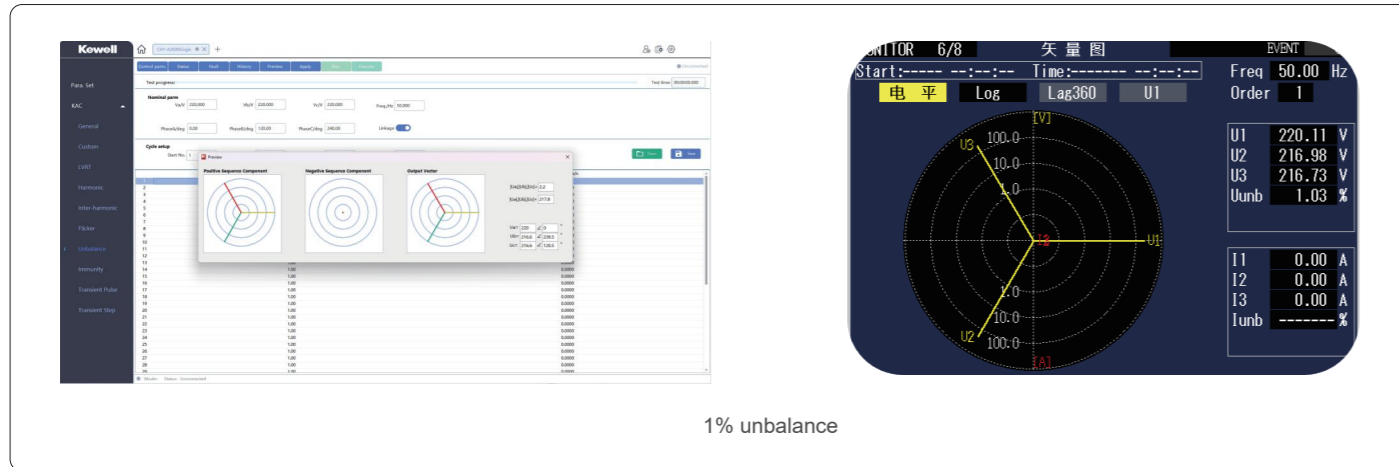
A2000 series features HVRT, LVRT, and combined HVRT&LVRT tests. It supports single-phase, two-phase, three-phase ride-through tests.



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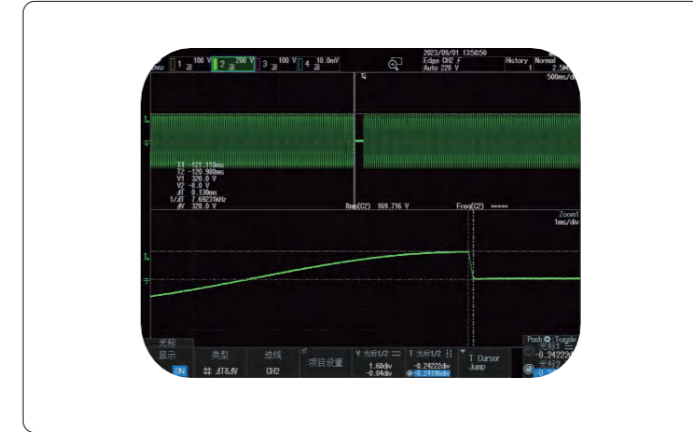
- **Three-phase Unbalance:**

Set the voltage three-phase unbalance to simulate the characteristics of grid unbalance. This applies to testing of inverters and other DUTs for adaptability to grid voltage imbalance.



- **Great Dynamic Performance:**

The A2000 series boasts great dynamic performance, with voltage slew rate $\geq 1V/\mu s$ and dynamic response (10%-90%Umax) $< 800\mu s$.



Product Highlights

- **New Design:**

- Easy replacement of faulty module
- One button to Power ON, One button to Emergency Stop
- Casters for easy move
- The self-developed 7-inch TFT touch screen provides a smooth operating experience.



Note: The picture is for reference of the modular design only.

- **Instantaneous Interruption:**

Support simulation of grid interruption of 1ms, in line with the requirements of relevant standards.



- **All-round Protections:**

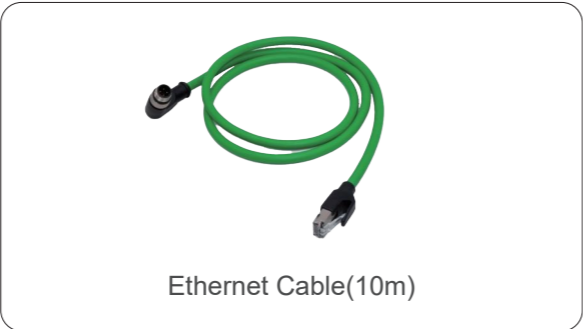
- All-round protections at both software and hardware levels.
- Equipped with input over-voltage, over-current, and out-phase protection functions.
- Equipped with output over-voltage, over-current.
- Equipped with protections against abnormal operating conditions such as over-temperature and over-power, and also with emergency stop.
- Fault query, historical fault query, and fault reset.

A2000 Options

Item	Description
Parallel connection kit	Parallel connection kit for 2 devices (including parallel communication cables, network cables, and switch)



A2000 Accessories



Note: ① The USB stick contains the software package (license will be provided by Kewell free of charge).