

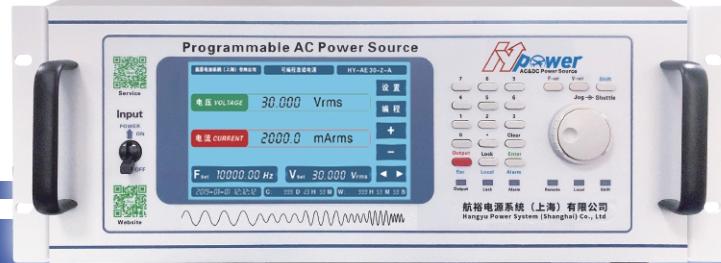


Hangyu Power System (Shanghai) Co., Ltd.

HY-AESU Series

AC Excitation Power Source

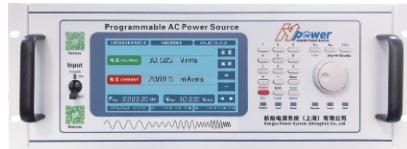
Military Quality Power Supply Expert



HY-AESU Series AC Excitation Power Source

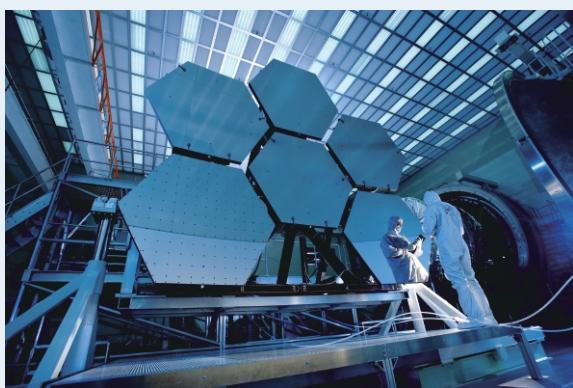


Waveform Pure, High Precision, High Reliability



Application Field

- Ground synchronization signal test
- Aviation military
- Testing laboratory
- AC sensor test
- Piezoelectric ceramics
- Magnetic material
- Medical treatment
- Scientific research



Product Features

- Output frequency range 100Hz-30kHz, optional range 100Hz-50kHz, Set the resolution to 0.01Hz
- Output capacity range 10VA-600VA
- Output voltage AC 0-30Vrms, set resolution 0.01V
- Output voltage accuracy: Class A (1%) Class B (0.5%) Class C (0.1%) Class D (0.05%)
- Linear power technology, low ripple noise, high stability, no high-frequency interference
- Support front panel programming, without upper computer software control
- Power output soft start function
- 16-bit D/A high precision converter for accurate output
- 16-bit A/D high precision converter, more accurate read back
- Multiple protection functions OVP, OCP, and OTP
- 19 inch standard rack or floor type
- 4 inches & 7-inch ultra large LCD display screen
- Touch screen operation & digital key input
- Multi-stage adjustment knob
- Output the ON/OFF button
- Fan intelligent speed control design, reduce noise
- Front/side air in, rear air out, saving heat dissipation space
- Support modbus protocol
- Standard interface: RS-485&RS-232
- Choose buy interface: LAN&CAN

GPIB

Analog quantity programming and monitoring

(Isolation type)

HY-AESU Series Product Selection Table

Product Model Naming Rules

Product Series	Output Voltage	Output Current	Output Frequency	Precision	Choose And Buy Function	Choose And Buy Function
HY-AESU	10	-	60	-	30K	-
Series name	Output voltage 0-10V	Output current 60A	Maximum frequency 30kHz	Voltage/frequency accuracy A/B/C/D grade accuracy	The short for Choose And Buy Function, see Choose And Buy Function	
Selection examples:						
Product model: HY-AESU 10-60-30K-A- CF Output voltage 0-10V, output current 60A, maximum output frequency 100Hz-30kHz, grade A accuracy,Custom features that users choose to purchase						

AESU

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■ In the selection table, special specifications outside the voltage/frequency/output capacity range are accepted for customization

HY-AESU Series AC Excitation Power Source (100Hz-30kHz)

Voltage	Output Capacity (VA)/Output current (Arms)					
	600VA	300VA	200VA	100VA	50VA	10VA
0-10Vrms	60A	30A	20A	10A	5A	1A
0-15Vrms	40A	20A	13.4A	6.7A	3.4A	0.6A
0-30Vrms	20A	10A	6.7A	3.4A	1.7A	0.3A

* When the equipment runs continuously for more than 30 minutes at the specified operating temperature, all technical indicators can be guaranteed.

AC Output

Connection mode	Single-phase two-wire + Ground wire(LN+PE)
Frequency setting range	100Hz-30kHz, optional 100Hz-50kHz
Frequency stabilization accuracy	100ppm, 10ppm, 1ppm Three gears available
Source effect	$\leq \pm 0.1\% \pm 5$ words F.S., input 220V $\pm 10\%$
Load adjustment rate	$\leq \pm 0.2\% \pm 5$ words F.S.
Waveform distortion (THD)	Sinusoidal wave, THD $\leq 0.5\%$ (resistance test) * According to 1000Hz, * Test when the output voltage is more than 50% of the rated voltage

Communication Interface

Standard configuration	RS-485 & RS-232
Choose and buy	LAN, CAN, GPIB, Analog quantity programming and monitoring (Isolation type)

Size

Size	2U, standard 19-inch rack mount, or desktop (fixed foot mat); 4U, standard 19-inch rack mount, or desktop (fixed foot mat);
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HY-AESU Series Technical Parameter

Programming And Readback Accuracy & Resolution

Voltage output programming accuracy	Grade A: 1%F.S.; Grade B: 0.5%F.S.; Grade C: 0.1%F.S.; Grade D: 0.05%F.S.
Frequency output programming accuracy	±0.01%F.S.
Voltage setting resolution	0.01V
Frequency setting resolution	0.01Hz
Voltage output read-back accuracy	Grade A: 1%F.S.; Grade B: 0.5%F.S.; Grade C: 0.1%F.S.; Grade D: 0.05%F.S.
Current output read back accuracy	±0.5%F.S.
Voltage read back resolution	0.01V
Current read back resolution	0.0001A (≤ 6A) ;0.001A (≤ 60A) ;0.01A (< 650A) ;0.1A (> 650A)

AESU

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Protection Function

Overload capacity	125% current 15s, 150% current 5s, 200% current 2s, 300% current stop immediately
Protection function	Overvoltage, overcurrent, internal overheating, short circuit

Environmental Condition

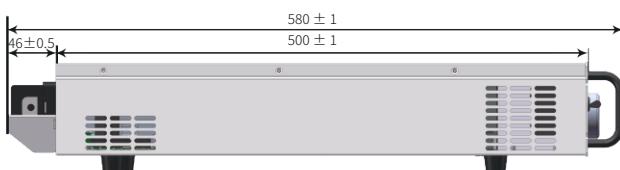
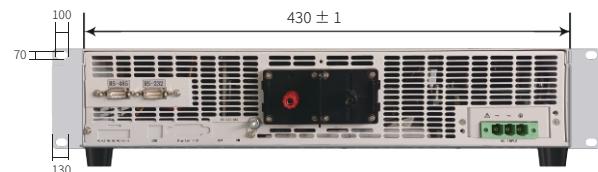
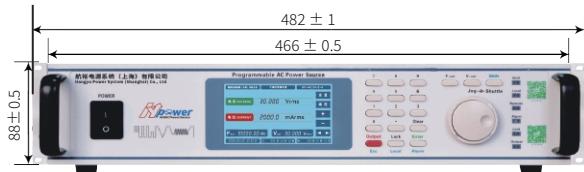
environment	Indoor use; Installation overvoltage class: II; Pollution level: P2; Class II equipment
Operating ambient temperature	0°C to 45°C; Choose from -20°C to 45°C
Storage ambient temperature	-20°C to 65°C
Working ambient humidity	20%-90%RH, no condensation, continuous operation
Storage environment humidity	10%-95%RH, no condensation
Altitude	Above 2000 meters above sea level, the power is reduced by 2% per 100 meters, or the maximum working ambient temperature is reduced by 1°C per 100 meters; When not in operation, it can reach an altitude of 12,000 meters
Cooling condition	Forced air cooling, intelligent speed regulating fan, front/side air inlet, rear air outlet
Noise	≤ 65dB(A), use 1m to weigh the measurement

Control Panel

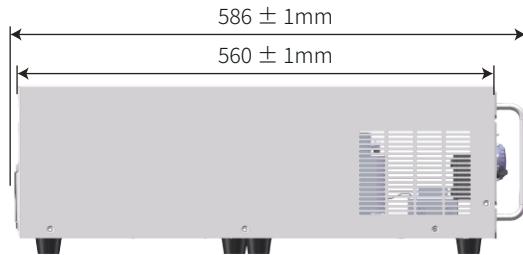
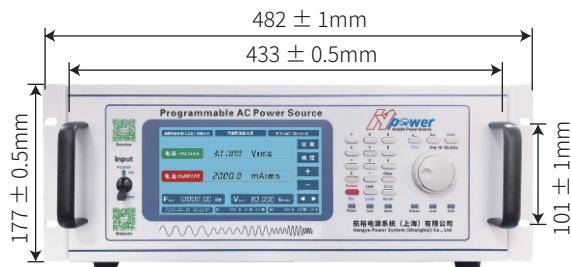
Display	4/7 inches, LCD LCD display, touch screen
Display item	Voltage (set value & measured value), current measurement value, frequency set value, working time, cumulative working time, current time and date
Control function	Digital key input, Multi-stage adjustment knob(outer ring coarse adjustment/inner ring fine adjustment) output ON/OFF switch, Lock keyboard and touch lock, Reset restart, Status indicator (Shift/Local/Remote/Alarm/Lock/Output)
Programming function	Step/ladder/gradient

Appearance & Size

2U 430(W) * 500(D) * 88(H) mm



4U 433(W)*560(D)*177(H)mm

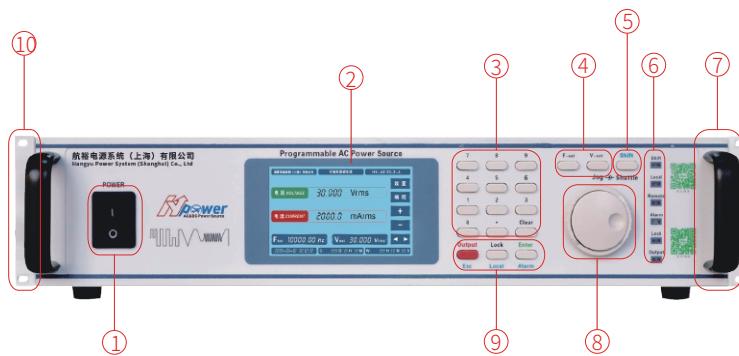


Size

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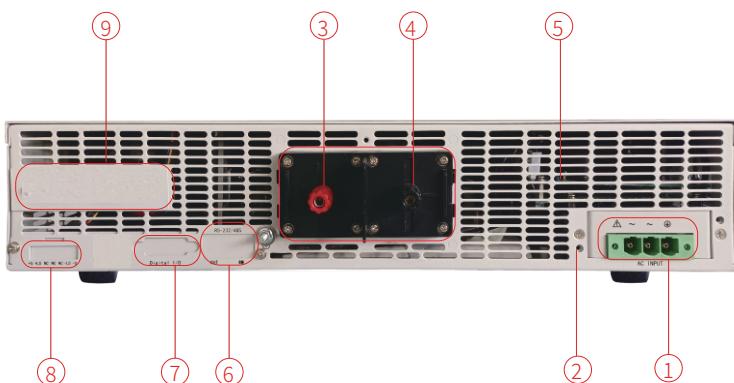
Display And Control Panel

Control Panel



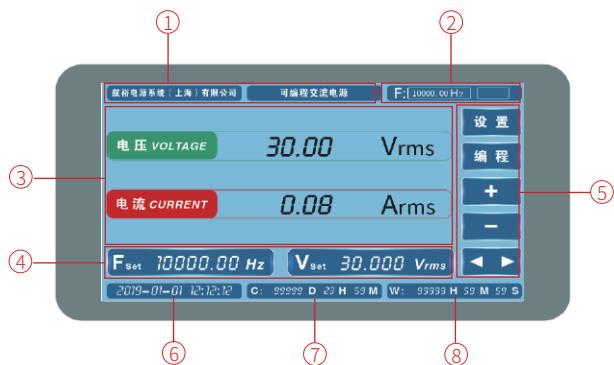
- ① Power input circuit breaker
- ② LCD display (4 inches, touch screen)
- ③ Numeric input keyboard
- ④ Frequency/voltage setting key
- ⑤ Shift function reuse key
- ⑥ Status indicator light
- ⑦ Case handle
- ⑧ Multi-stage adjustment knob (inner ring fine adjustment/outer ring coarse adjustment)
- ⑨ Lock, Enter, Esc, Local, Reset, Output ON/OFF Switch
- ⑩ 19-inch standard rack mounting holes

Rear Panel



- ① AC Input terminal
- ② Input protective cover
- ③ AC output terminal (+/-)
- ④ Output protective cover
- ⑤ Heat dissipation air outlet
- ⑥ RS-485 & RS-232 communication interface
- ⑦ Digital I/O communication interface
- ⑧ Remote compensation measuring terminal
- ⑨ Choose and buy communication interface
- LAN & CAN communication interface
- GPIB communication interface
- Analog quantity programming and monitoring (Isolation type)

Display Interface



- ① Company and product name
- ② Frequency display area
- ③ Voltage and current display area
- ④ Frequency/voltage setting value
- ⑤ Function setting area
- ⑥ Current time
- ⑦ Cumulative running time
- ⑧ This run time

Size

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*Hangyu Power System, 2024

HY-AESU Series Product Manual, Version 06.12, June 2025

All technical data and instructions are based on the actual product

If there is any change, Hangyu Power has the final interpretation right

Authorized distributor:

