



Hangyu Power System (Shanghai) Co., Ltd.

## HY-CTLSU Series

### Capacitor Test Linear Power Source

#### Military Quality Power Supply Expert



# HY-CTLSU Series Capacitor Test Linear Power Source



## Application Field

- Ripple durability testing of thin film capacitors
- Temperature rise test
- Aging test



## Product Features

- Output frequency range 100Hz-200kHz optional
- Output capacity range 50VA - 30kVA optional
- Output voltage optional 0-10kVrms
- Maximum output current 1kArms
- Support front panel programming, without upper computer software control
- The voltage rise and fall slopes are adjustable
- 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 size
- 7-inch ultra large LCD display screen
- Touch screen operation & digital key input
- Multi-stage adjustment knob
- The power input is controlled by circuit breaker, which is more secure
- 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-CTLSU Series Product Selection Table

Product Model Naming Rules					
Product Series	Output Voltage	Output Current	Maximum Frequency	DC Voltage	Choose And Buy Function
HY-CTLSU	100	-	10	-	FE20K
Series name	The output voltage 0-100V	The output current 10A	FE indicates the maximum frequency 20kHz	The DC voltage 2000V	
Selection example: Product model: HY-CTLSU 100-10-FE20k-D2000V Output voltage 0-100V, output current 10A, maximum frequency 20kHz, DC voltage 2000V					

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

HY-CTLSU Series Capacitor Test Linear Power Source		
AC output	Capacity (VA)	50VA-30kVA
	Voltage (Vrms)	0~30 Vrms/0~50 Vrms/0~100 Vrms/0~150 Vrms/0~200 Vrms/0~300 Vrms/Max10 kV
	Current (Arms)	1Arms~1000Arms
	Frequency range (Hz)	45Hz~70Hz/100Hz~1kHz/100Hz~2kHz/10kHz~100kHz/50kHz~200kHz
DC output	Capacity (W)	500W~30kW
	Voltage (V)	0~10kV

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

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# HY-CTLSU Series Technical Parameters

## AC Input

Connection mode	Single phase two wire + ground wire	Three phase three wire & three phase four wire + ground wire
Input voltage	220Vrms±15%	380Vrms±15%
Input frequency	47Hz-63Hz	47Hz-63Hz

## AC Output

Connection mode	Single phase two wire + ground wire	Three phase three wire & three phase four wire + ground wire
Input frequency	100Hz-200kHz, Resolution 0.01Hz	
Output capacity	Optional range 50VA-30kVA	
Output voltage	Optional range 1~10kV	
Output current	Optional range 1~1000A	
Frequency stabilization accuracy	±0.1%F.S.	

## DC Part

Stable voltage, stable current accuracy	Source effect: ≤0.5% rated value (The output voltage change rate caused by a ± 10% variation in input source voltage)
	Time drift: ≤0.3% rated value (The output voltage change rate caused by the continuous operation time of the power supply exceeding 8 hours)
	Temperature drift: ≤0.04% rated value /°C(Only due to the rate of change of output voltage caused by changes in ambient temperature within the range of ambient temperature used by the power supply)
	Load effect: ≤0.2% rated value (Rate of change of output voltage due only to change of output current from zero to rating)
Ripple(rms)	≤0.01%+10mV (80%~100%Measured at rated output)
Output voltage regulation range	0~Rated voltage
Output current adjustment range	The rated current value is continuously adjustable
Output voltage display resolution	0.1V (≤10000V)、1V (>10000V)
Output current display resolution	0.001A (≤100A)、0.01A (100A < 1A ≤ 1000A)

## AC Part

Output voltage regulation range	0~The rated voltage value is continuously adjustable
Output frequency adjustment range	Acceptable customization
Output voltage display resolution	0.1V/0.01V
Output current display resolution	0.1A/0.01A

## Protection Function

Protection function	Overvoltage, overcurrent, internal overheating, short circuit
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# HY-CTLSU Series Technical Parameters

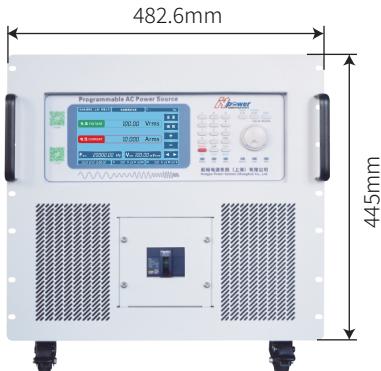
Environmental Condition	
Operating ambient temperature	0°C to 45°C; Choose from -20°C to 45°C
Storage ambient temperature	-20°C to 65°C
Working ambient humidity	20%-90%RH, no condensation, continuous operation
Storage environment humidity	10%-95%RH, no condensation
Altitude	Above 2000 meters above sea 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	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	7 inches, LCD LCD display, touch screen
Display item	Voltage (set value and 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)
Communication Interface	
Standard configuration	RS-485 & RS-232
Choose and buy	LAN, CAN, GPIB, Analog quantity programming and monitoring (Isolation type)
Appearance Color & Size	
Colour	RAL 7035
Size	10U, standard 19-inch rack type, or floor type (with movable universal casters and brakes); 18U and above, floor type cabinets, with movable universal casters and brakes.

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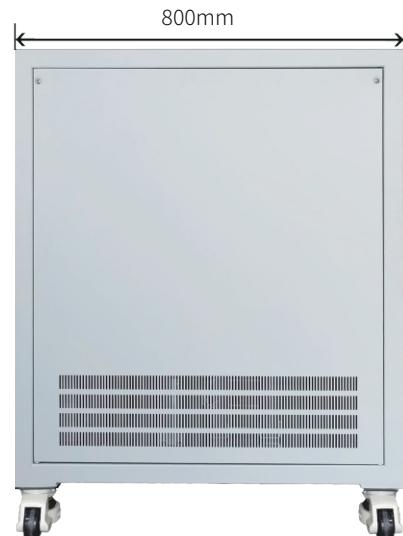
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## Appearance & Size

10U 440(W)\*600(D)\*445(H)mm



18U 600(W)\*800(D)\*920(H)mm

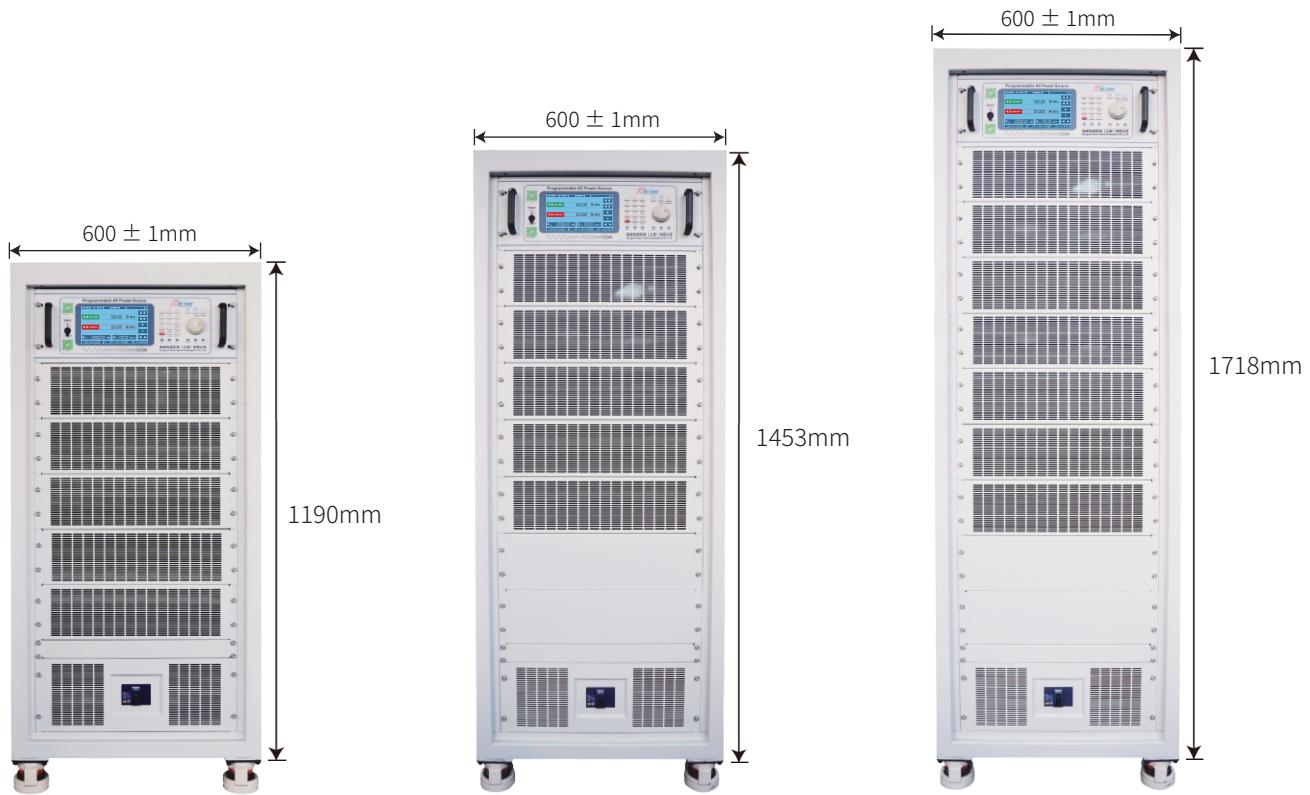


Size

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## Appearance & Size

24U 600(W)\*800(D)\*1190(H)mm  
30U 600(W)\*800(D)\*1453(H)mm  
36U 600(W)\*800(D)\*1718(H)mm

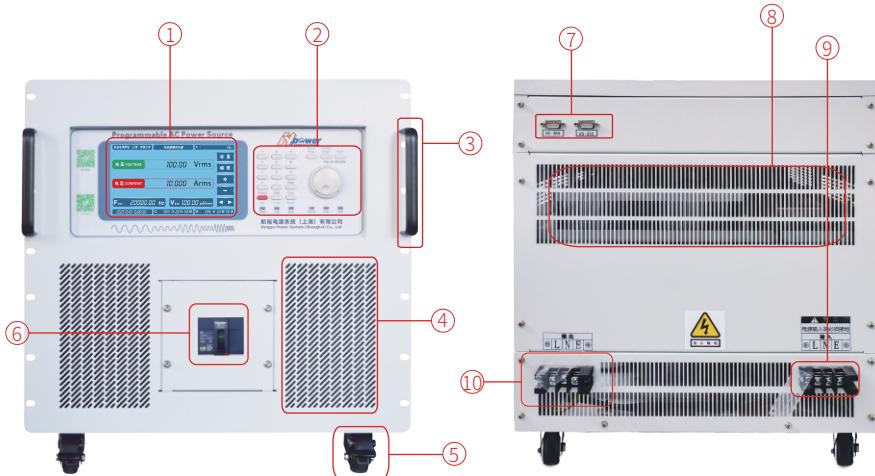


Size

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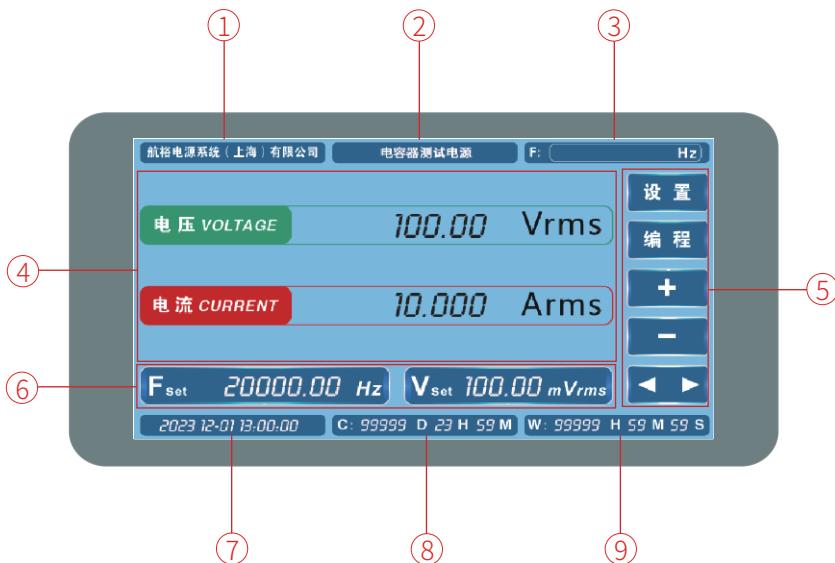
# Display And Control Panel

## Front Panel & Rear Panel



- ① LCD display (7 inches, touch screen)
- ② Control area
- ③ 19-inch standard rack handle
- ④ Heat dissipation air inlet
- ⑤ Casters wheel
- ⑥ Power input circuit breaker
- ⑦ Communication interface
- ⑧ Heat dissipation air outlet
- ⑨ AC input terminals
- ⑩ AC output terminal

## Display Interface



- ① Manufacturer's name
- ② Product name
- ③ Frequency display area
- ④ Voltage and current display area
- ⑤ Setting, programming, digital adjustment area
- ⑥ Frequency/voltage setting value
- ⑦ Current time
- ⑧ Accumulated running time
- ⑨ This run time

Client

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## Contact us

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HY-CTLSU Series Product Manual, Version 6.12, 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:

