

CHAALAKAM CPS6010D DATASHEET

600W
0-60V 0-10A



**HIGH POWER SERIES SWITCHING
VARIABLE POWER SUPPLY**

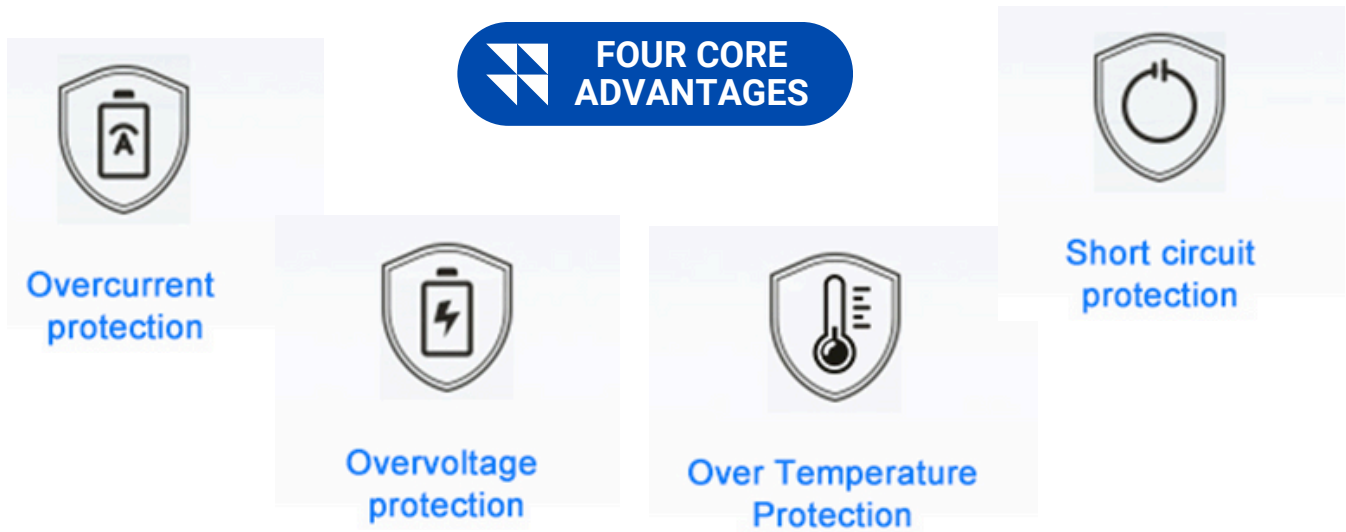


The CPS high-power series represents a class of advanced, programmable switch-mode DC regulated power supplies engineered for demanding laboratory and production test environments. Combining robust power delivery with exceptional control and monitoring capabilities, this series is designed to meet the rigorous requirements of modern electronic development and validation

Key Features

- **High-Density Power Delivery** - Engineered with a compact, lightweight form factor, the CPS series delivers high output power and current, maximizing power density for bench-top and system integration applications without compromising performance
- **Three-window, four-digit display Instrumentation** - An integrated Three-window, four-digit display provides simultaneous, high-resolution readout of output voltage, current output and wattage output, facilitating precise real-time monitoring and system diagnostics
- **Programmable Control & Adjustment** - Output parameters are precisely configured via a digital encoded potentiometer, enabling seamless and continuous adjustment from zero to the full nominal rated value with excellent resolution.
- **Superior Dynamic Response** - The architecture is optimized for fast transient response, ensuring stable output voltage with minimal deviation under rapidly fluctuating load conditions, which is critical for testing dynamic power profiles

- **Integrated Measurement System** - The high-accuracy digital metering provides superior readback resolution, ensuring reliable measurement and monitoring of output parameters without the need for external instruments.
- **Exceptional Output Characteristics** - Designed for low noise and outstanding ripple performance, the unit provides a clean and stable DC source. It exhibits excellent long-term stability and a low ripple coefficient, ensuring measurement integrity.
- **Robust Operational Reliability** - The robust design, complemented by its comprehensive protection systems, allows for continuous, reliable operation at full rated load, ensuring high uptime in intensive applications.
- **Compact, lightweight chassis** designed for both bench-top and standard rack-mount applications
- A temperature-controlled fan provides effective heat dissipation, resulting in low acoustic noise and an extended operational lifespan
- **Comprehensive Protection Suite** - Incorporated protection circuitry ensures operational integrity and safeguards connected devices.



Brand Name	Chaalakam	Input Voltage	220V ± 10%	Output Voltage	0~60V
Model Number	CPS6010D	Input Frequency	50Hz	Output Current	0~10A
Output Type	Single	Display	LED	Color	White
Dimensions	210(L) x 160(W) x 80(H) mm			Weight	2.00Kg

Product Parameters

Operating Requirements	
Input Voltage	AC 220V \pm 10%; 50Hz
Operating temperature	0 °C ~ 40 °C ; Relative humidity : <80% RH
Storage temperature	-10 °C ~ 70 °C ; Relative humidity : <70% RH
Output voltage	0-60V Variable
Output Current	0-10A Variable
Output Power	600W
Set value resolution	Voltage 0.01V
	Current 0.01A
Display value resolution	Voltage 0.01V
	Current 0.01A

Header Display	
Display	0.4-inch white LED display features 4digits with 3display groups
Display accuracy	0.5% \pm 3 characters
Display resolution	Voltage 0.01V , Current 0.01A

Constant Voltage State CV	
Voltage stability	0.5% \pm 20mV
Load stability	0.5% \pm 20mV
Ripple voltage	\leq 0.5% Vp-p

Constant Current State CC	
Current stability	0.5% \pm 20mA
Load stability	0.5% \pm 20mV
Ripple voltage	\leq 0.5% Ap-p
Temperature coefficient	\leq 100ppm/ °C

Ascent Time	No load \leq 15ms
	Full load \leq 30ms
Dynamic response time	\leq 2ms
Accessibility	Output Switch (OUT), Short Circuit Protection Switch (OCP)
Protection function	Overvoltage protection(OVP),Overcurrent protection(OCP) Overload Protection(OPP),Over Temperature Protection(OTP)

Target Applications

The CPS series is ideally suited for a wide spectrum of industries and test scenarios, including

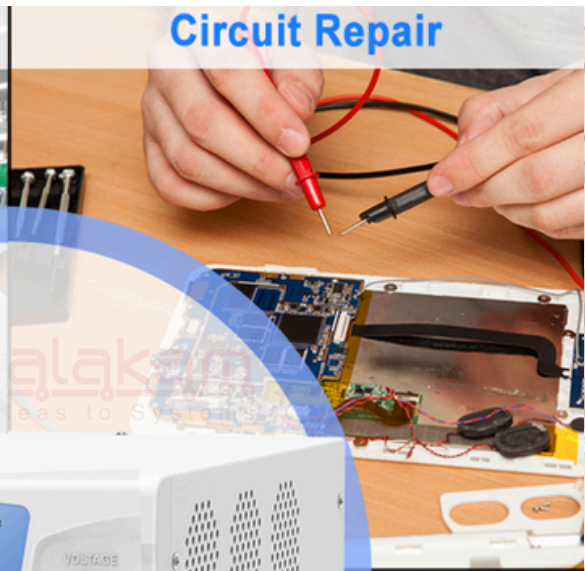
- Aerospace and Defense Systems
- Consumer Electronics & Computer Peripherals
- Telecommunications Infrastructure
- Semiconductor Characterization & Burn-in
- Photovoltaic (Solar Energy) System Testing
- Automotive Electronics (e.g.ECUs, Infotainment)
- Production line Testing
- Laboratory, Scientific Research Teaching



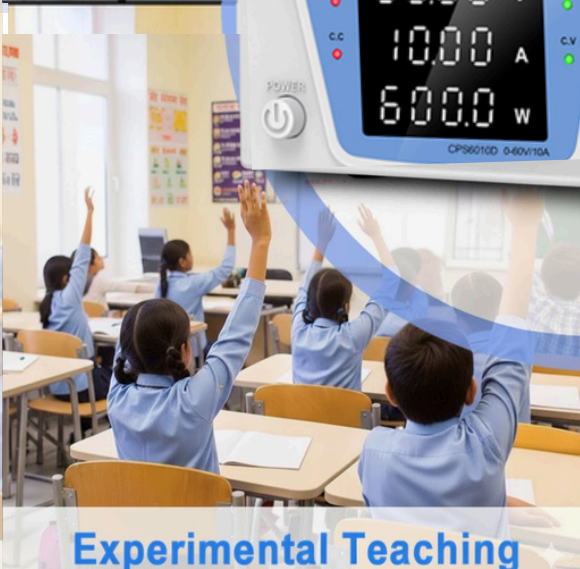
Production Testing



Circuit Repair



Experimental Teaching



Pilot Test

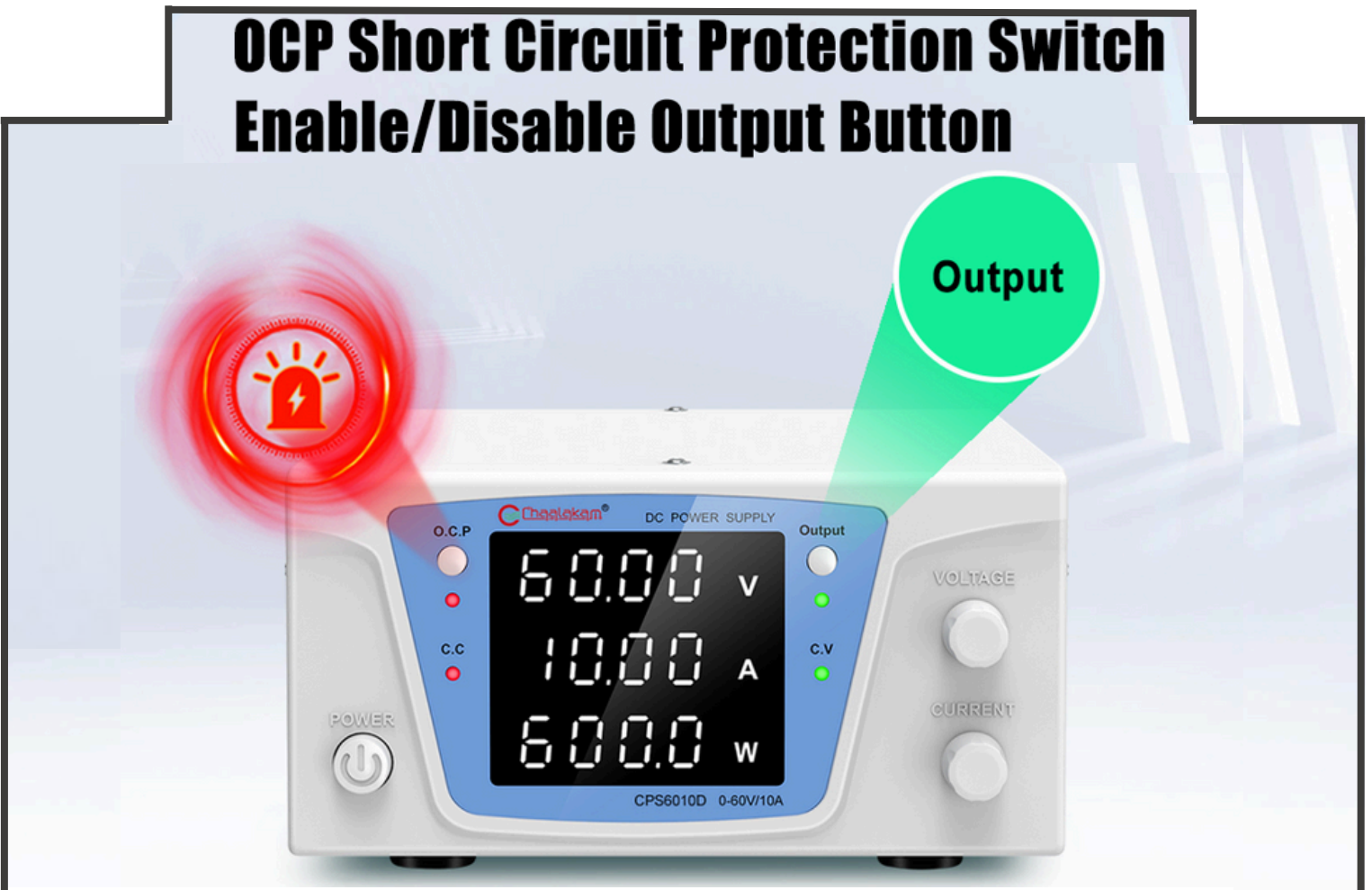


Special features

Encoder Knob For Precise Adjustment



OCP Short Circuit Protection Switch Enable/Disable Output Button



What's in the Box

- (1) CPS Series Power Supply Unit
- (1) User Manual
- (1) AC Power Cord
- (1) Output Cable
- (1) Set of Wiring Lugs



1-meter 6mm² Cable with **40A** Capacity

Power Supply × 1



Power Cord × 1



Output Cable × 1



Wiring Lug × 2


Encoder Adjustment


Smart Cooling Fan


Output Key


Long Hours


Short Circuit Alarm


Multiple Protection


4-Digit Display


Small Size And Light Weight



Product Dimensions

