

TPS300P

DC SWITCHING POWER SUPPLY



Overview

TPS series power supply is a high-precision, high-reliability, constant-voltage, constant-current, constant-power switching linear regulated power supply. The product adopts innovative double voltage-regulated structure of switch regulated voltage + linear regulated voltage, and also features high efficiency and high power of switching power supply, and the low ripple and high reliability of the linear power supply.

Application

- Automated testing
- Education, scientific research, laboratory
- LED lighting field
- Electromechanical field
- Other tests, product aging use
- Photovoltaic new energy field
- Automotive electronic testing

Features

- High precision voltage, ammeter head and pure MCU digital control output for better stability and higher precision.
- Dual voltage stabilizing structure, high efficiency, low ripple, low noise output.
- Product constant voltage CV / constant current CC mode, which enables continuously adjustable output within the rated range.
- It can be converted to external control mode, external input control voltage, used to control the main power supply voltage and current output.
- It has extended master-slave parallel, series operation mode, which is more convenient for user to use series-parallel expansion.
- Provide 10 convenient and fast parameter storage functions (including OVP and OCP setting values), which is convenient for users to quickly and directly call the output
- Provide OVP, OCP, OHP protection and alarm functions.
- Provide external monitoring function for main output voltage and .curr
- It has functions of storable output parameters, status lock, and alarm. The intelligent cooling system adopts a double ball fan
- The intelligent cooling system adopts a double ball fan to automatically control the fan speed according to the internal temperature, making it quieter and longer-lived.
- Support computer program control, standard RS232 communication interface.

Technology specification and function features:

Model	TPS300P	
Rated output voltage	0~75V	
Rated output current	0~10A(Limited by output power)	
Power supply voltage	AC 115V / 230V 50~60HZ(Optional)	
Rated output power	300W	
Setting accuracy	CV: $\pm(0.1\%\text{set}+0.05\%\text{rating})$	CC: $\pm(0.3\%\text{set}+0.1\%\text{rating})$
display accuracy	CV: $\pm(0.1\%\text{rdng}+2\text{digits})$	CC: $\pm(0.2\%\text{rdng}+2\text{digits})$
Power adjustment rate	CV: $\leq 0.01\%+3\text{mV}$	CC: $\leq 0.1\%+5\text{mA}$
Load regulation	CV: $\leq 0.01\%+5\text{mV}(<5\text{A})$	CC: $\leq 0.01\%+5\text{mA}$
Ripple	CV: $\leq 5\text{mVrms}$	CC: $\leq 3\text{mArms}$
Dynamic response	$\leq 100\mu\text{s}$	
Quick access	10 group (Contain OVP OCP)	
Protection functions	OVP/OCP/OHP	
Heat-dissipating method	Smart fan control	
Weight	G.W.: 3KG	
Size(WxHxD)	125x170x260(mm)	