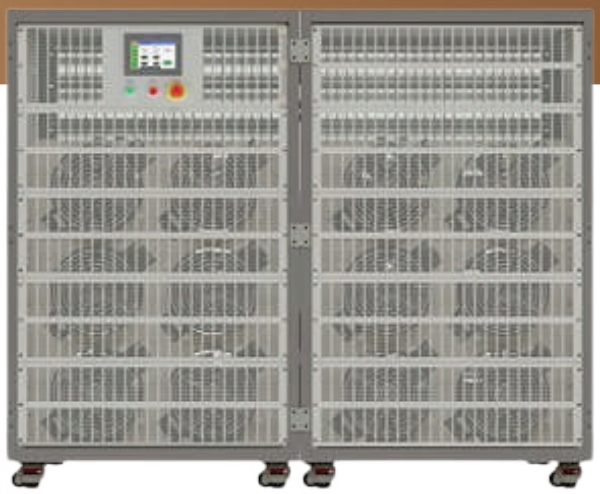
DC Power Supply

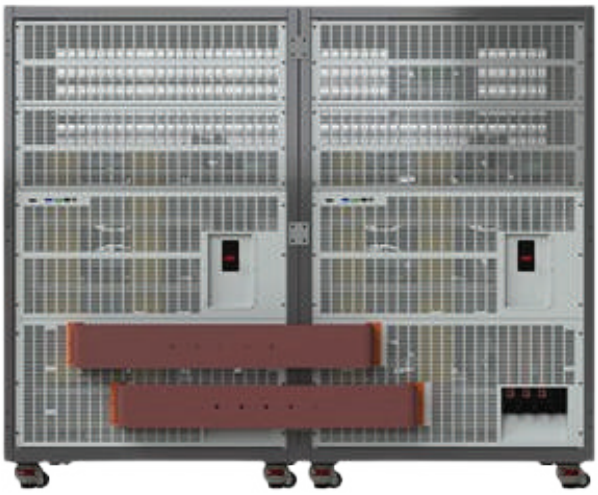
30kW-1000kW High-Power Programmable DC Power Supply
TWS-Series

Product description:

TWS-series high-power DC power supply series is controlled by high-efficiency chips and adopts IGBT module adjustment mode. The single-machine power is 30KW-1000KW, the voltage range is 0-10000V, and 0-10000A can be customized according to customer needs. It has the characteristics of high efficiency, high precision, high stability, etc. It is equipped with a variety of auxiliary functions to make it more convenient and reliable for users to use. It is mainly used in scientific research units, laboratories, and electronic production lines that require high-efficiency power supply testing.



TWS1800-300
(Front panel)



TWS1800-300
(Rear panel)

Features

- Power range: single machine power 30KW-1000KW.
- Voltage range: 0-10000V, 0-10000A can be customized.
- Output indication: high-precision voltage and current display, LCD touch screen display.
- Constant voltage and constant current: the output constant voltage and constant current are automatically switched, and the voltage and current values are continuously and linearly adjusted
- Protection function: overvoltage protection, overcurrent protection, overtemperature protection, overload protection.
- Communication function: RS232, RS485, LAN interface as standard, CAN port as optional.
- External sampling: This machine is equipped with external compensation as standard, which can reduce the voltage drop caused by a long output circuit (optional).
- Optional external control function: optional input analog signal to control power output (DC0-5V signal) (optional).
- Optional remote display: optional analog output signal to display power status (DC0-5V signal) (optional).

Ordering Information

TWS1800-300 : 540kW/1800V/300A Programmable DC Power Supply

Standard Accessories :

- User Manual
- Power cord
- RS-232 cable
- Software CD

Standard Features

Operation Mode		
Line regulation	Voltage : ≤0.1% FS rms	Current : ≤0.1% FS rms
Lod regulation	Voltage : ≤0.1% FS rms	Current : ≤0.1% FS rms
Ripple & Noise (20Hz ~ 20MHz)	Voltage : ≤0.3% FS + 50mVrms	Current : ≤0.1% FS + 10mArms
Time drift	Voltage : ≤0.5% FS rms	Current : ≤1% FS rms
Temperature drift	Voltage : ≤0.1% FS rms	Current : ≤0.3% FS rms
Setting Accuracy	Voltage : ≤0.1% FS + 20mV (≤100V) ≤0.1% FS + 100mV (300V) ≤0.1% FS + 300mV (≥600V)	
	Current : ≤0.3% FS + 10mA	
Setting Resolution	Voltage : 0.01V / 0.1V / 1V	Current : 0.001A / 0.01A / 0.1A / 1A
Readback Accuracy	Voltage : ≤0.1% FS + 20mV (≤100V) ≤0.1% FS + 100mV (300V) ≤0.1% FS + 300mV (≥600V)	
	Current : ≤0.3% FS + 10mA	
Readback Resolution	Voltage : 0.01V / 0.1V / 1V	Current : 0.001A / 0.01A / 0.1A / 1A
Response Time	≤5mS (10% ~ 90% Adj. Load)	
Protection	OVP, OCP, OTP and short-circuit	
O.V.P Setting Range	0.1V ~ 110% of Voltage range	
O.C.P Setting Range	0.1A ~ 110% of Current range	
Interface	RS-232, RS-485 and support ModBus-RTU commands	
Analog Output (Option)	Select : 0~5V, 0~10V or 4~20mA for control and reserve of voltage and current	
Cooling Method	Air Cooling	
Operating environment	0 ~ 40˚C, 10% ~ 80%RH	
Storage environment	-20 ~ 70˚C, 10% ~ 90%RH	
Input Power	≤ 6k : 1p2W, 220V±10% 50/60Hz	
	> 6k : 3p4W, 380V±10% 50/60Hz	
Input Module	Power scoket or Terminal box	

Specifications

Model		TWS1800-300
Rate Output	Power	0 ~ 540kW
	Voltage	0 ~ 1800V
	Current	0 ~ 300A
Load Regulation	Voltage	≤1%FS
	Current	≤1%FS
Set Value Resolution	Voltage	0.1V
	Current	1A
Readback Value Resolution	Voltage	0.1V
	Current	1A
Set Value Accuracy		≤1%FS + 200mV
		≤1%FS + 200mA
Readback Value Accuracy		≤1%FS + 200mV
		≤1%FS + 200mA
Ripple & Noise (20Hz~20MHz)		Voltage regulation : ≤1% + 10mV (rms)
		Steady current state : ≤1% + 10mV (rms)
Dynamic Resposne Time (10 ~ 90% Load)		≤5ms
Voltage Setting and preset		Touch-screen
Current Setting and Preset		Touch-screen
Interface		Standard RS-232, RS-485, LAN
Protection Function		Over-voltage, Over-current, Short circuit, Tempertaure protection
Heat Dissipation Methold		Force air colling
Operation Environment		Indoor use, Ambient tempertaure : 0 ~ 40˚C, Humidity : 10% ~ 85%RH
Storage Environment		Temperature : -20˚C ~ 70˚C, Humidity : 10% ~ 90%RH
Power Input		AC 380V±10%, 50Hz
Dimension (WxHxD)		2400x1865x937 mm.