

High Power DC Power Supply PCL series

Introduction

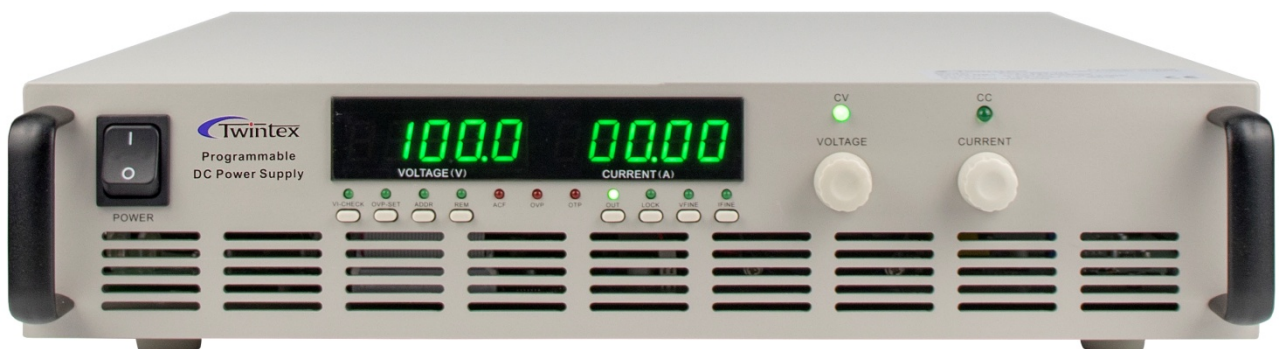
The PCL series are high power output Switching DC power supply with rated power of 600W, 1200W and 2400W. The PCL series adopts ZVZCS PWM technology, which greatly reduces switching consumption and therefore facilitates switching function with high efficiency and high stability.

The PCL series are built into a 2U 19-inch standard chassis. The maximum rated voltage is from 6V to 600V and the maximum rated current is from 2A to 200A. RS232, RS485 and RS422 communication interfaces are made as standard part for PCL series, providing multiple communication choices for digital control.

Features

- ✓ Max.rated output 600W, 1200W and 2400W
- ✓ Max.rated voltage from 6V to 600V, max.rated current from 2A to 200A
- ✓ Constant voltage and constant current operations, auto CV/CC switch
- ✓ Built into 2U 19-inch standard chassis
- ✓ 4 1/2 digits LED display for voltage and current
- ✓ Thermostatic control fan, low noise
- ✓ Adopting ZVZCS PWM technology, high efficiency and high stability
- ✓ Low ripple, high stability
- ✓ Front panel operation: preset voltage and current, output ON/OFF
- ✓ Multiple protections: OVP, OTP, UVP and current limit protections
- ✓ Multiple programming interfaces: RS232, RS485 and RS422
- ✓ Support ModBus-RTU commands

Product photo



For max.current <100A



For max.current ≥100A

High Power DC Power Supply



Specifications 600W

Model		PCL600-1H	PCL600-150	PCL600-2H	PCL600-3H	PCL600-4H	PCL600-5H
Output							
Rated output	Voltage	0~100V	0~150V	0~200V	0~300V	0~400V	0~500V
	Current	0~6A	0~4A	0~3A	0~2A	0~1.5A	0~1.2A
	OVP	0~105V	0~157.5V	0~210V	0~315V	0~420V	0~525V
Load regulation		CV≤0.1%+2LSB, CC≤0.2%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤100mV	≤100mV	≤200mV	≤200mV	≤200mV	≤200mV
Programming resolution	OVP	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.001A	0.001A	0.001A	0.001A	0.001A	0.001A
Display resolution	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.001A	0.001A	0.001A	0.001A	0.001A	0.001A
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

High Power DC Power Supply



Specifications 1200W (1)

Model		PCL1200-6	PCL1200-12	PCL1200-15	PCL1200-30	PCL1200-60	PCL1200-1H
Output							
Rated output	Voltage	0~6V	0~12V	0~15V	0~30V	0~60V	0~100V
	Current	0~200A	0~100A	0~80A	0~40A	0~20A	0~12A
	OVP	0~6.3V	0~12.6V	0~15.75V	0~31.5V	0~63V	0~105V
Load regulation		CV≤0.2%+2LSB, CC≤0.2%+2LSB		CV≤0.1%+2LSB, CC≤0.1%+2LSB			
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤50mV	≤50mV	≤50mV	≤50mV	≤50mV	≤100mV
Programming resolution	OVP	0.001V	0.01V	0.01V	0.01V	0.01V	0.1V
	Voltage	0.001V	0.01V	0.01V	0.01V	0.01V	0.1V
	Current	0.1A	0.1A	0.01A	0.01A	0.01A	0.01A
Display resolution	Voltage	0.001V	0.01V	0.01V	0.01V	0.01V	0.1V
	Current	0.1A	0.1A	0.01A	0.01A	0.01A	0.01A
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

High Power DC Power Supply



Specifications 1200W (2)

Model		PCL1200-150	PCL1200-2H	PCL1200-3H	PCL1200-4H	PCL1200-5H	PCL1200-6H
Output							
Rated output	Voltage	0~150V	0~200V	0~300V	0~400V	0~500V	0~600V
	Current	0~8A	0~6A	0~4A	0~3A	0~2.4A	0~2A
	OVP	0~157.5V	0~210V	0~315V	0~420V	0~525V	0~630V
Load regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤100mV	≤100mV	≤100mV	≤100mV	≤200mV	≤200mV
Programming resolution	OVP	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.001A	0.001A	0.001A	0.001A	0.001A	0.001A
Display resolution	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.001A	0.001A	0.001A	0.001A	0.001A	0.001A
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

High Power DC Power Supply



Specifications 2400W (1)

Model		PCL2400-12	PCL2400-20	PCL2400-30	PCL2400-40	PCL2400-60	PCL2400-1H
Output							
Rated output	Voltage	0~12V	0~20V	0~30V	0~40V	0~60V	0~100V
	Current	0~200A	0~120A	0~80A	0~60A	0~40A	0~24A
	OVP	0~12.6V	0~21V	0~31.5V	0~42V	0~63V	0~105V
Load regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤100mV	≤100mV	≤100mV	≤100mV	≤100mV	≤100mV
Programming resolution	OVP	0.01V	0.01V	0.01V	0.01V	0.01V	0.1V
	Voltage	0.01V	0.01V	0.01V	0.01V	0.01V	0.1V
	Current	0.1A	0.1A	0.01A	0.01A	0.01A	0.01A
Display resolution	Voltage	0.01V	0.01V	0.01V	0.01V	0.01V	0.1V
	Current	0.1A	0.1A	0.01A	0.01A	0.01A	0.01A
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

High Power DC Power Supply



Specifications 2400W (2)

Model		PCL2400-150	PCL2400-2H	PCL2400-3H	PCL2400-4H	PCL2400-50H	PCL2400-6H
Output							
Rated output	Voltage	0~150V	0~200V	0~300V	0~400V	0~500V	0~600V
	Current	0~16A	0~12A	0~8A	0~6A	0~4.8A	0~4A
	OVP	0~157.5V	0~210V	0~315V	0~420V	0~525V	0~630V
Load regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤100mV	≤100mV	≤200mV	≤200mV	≤200mV	≤200mV
Programming resolution	OVP	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.01A	0.01A	0.001A	0.001A	0.001A	0.001A
Display resolution	Voltage	0.1V	0.1V	0.1V	0.1V	0.1V	0.1V
	Current	0.01A	0.01A	0.001A	0.001A	0.001A	0.001A
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

Specifications are subject to change without prior notice.

High Power DC Power Supply



Specifications 3000W

Model		PCL3000-1H					
Output (Max.power is limited to 3000W)							
Rated output	Voltage	0~100V					
	Current	0~33A					
	OVP	0~105V					
Load regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤100mV					
Programming resolution	OVP	0.1V					
	Voltage	0.1V					
	Current	0.01A					
Display resolution	Voltage	0.1V					
	Current	0.01A					
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
Programming							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
Protection							
Over Voltage Protection (O.V.P.)		Built-in OVP protection with limit of 105% rated output voltage. The output will be shut down when OVP is activated.					
Over Temperature Protection (O.T.P.)		Built-in OTP protection with heat sink temperature limit of 50°C±5%. The output will be shut down when OTP is activated.					
Under Voltage Protection (U.V.P.)		Built-in UVP protection with limit of 165Vac. The output will be shut down when UVP is activated.					
General							
Cooling method		Cooling fan					
Operating environment		0°C~40°C, 10%~80%RH					
Storage environment		-20°C~70°C, 10%~90%RH					
Power source		AC220V±10%, 47~63Hz					
Weight		11~14kg					
Dimensions		482Wx88Hx460D mm					

Specifications are subject to change without prior notice.