

## High Voltage DC Power Supply PCH series

### Introduction

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

The PCH series are built into a 2U 19-inch standard chassis. The maximum rated voltage is from +1000V to +12KV. There is an option for negative output from -1000V to -12KV. RS232, RS485 and RS422 communication interfaces are made as standard parts for PCH series, providing multiple communication choices for digital control.

### Features

- ✓ Max. rated output 600W and 1200W
- ✓ Max. rated voltage from +1000V to +12KV
- ✓ Option for negative output from -1000V to -12KV
- ✓ 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, OCP, OTP, OLP and UVP
- ✓ Multiple programming interfaces: RS232, RS485 and RS422
- ✓ Support ModBus-RTU commands

### Product photo



# High Voltage DC Power Supply



## Specifications

Model		PCH600-10H	PCH600-12H	PCH600-15H	PCH600-20H	PCH600-30H	PCH600-40H	PCH600-50H
<b>Output</b>								
Rated output	Voltage	0~1000V	0~1200V	0~1500V	0~2000V	200~3000V	200~4000V	300~5000V
	Current	0~600mA	0~500mA	0~400mA	0~300mA	0~200mA	0~150mA	0~120mA
	OVP	0~1050V	100~1260V	100~1575V	200~2100V	200~3150V	200~4200V	300~5250V
Load regulation		CV≤0.5%+2LSB, CC≤0.5%+2LSB						
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB						
Ripple & Noise		≤0.05% FS	≤0.05% FS	≤0.05% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS
Programming resolution	Voltage	1V	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
	OVP	1V	1V	1V	1V	1V	1V	1V
Display resolution	Voltage	1V	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB						
<b>Programming</b>								
Interface		RS232, RS485 and RS422						
Commands		ModBus-RTU						
<b>Protection</b>								
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 Current Protection (O.C.P.)		Over load, short circuit and output current limit						
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 the UVP is activated.						
<b>General</b>								
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 Voltage DC Power Supply



Model		PCH600-60H	PCH600-80H	PCH600-100H	PCH600-120H	PCH1200-10H	PCH1200-12H
<b>Output</b>							
Rated output	Voltage	500~6000V	500~8000V	800~10000V	1000~12000V	0~1000V	0~1200V
	Current	0~100mA	0~75mA	0~60mA	0~50mA	0~1.2A	0~1A
	OVP	500~6120V	500~8400V	800~10500V	1000~12600V	0~1050V	0~1260V
Load regulation		CV≤0.5%+2LSB, CC≤0.5%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS
Programming resolution	Voltage	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.01mA	0.01mA	0.01mA	1mA	1mA
	OVP	1V	1V	1V	1V	1V	1V
Display resolution	Voltage	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.01mA	0.01mA	0.01mA	1mA	1mA
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
<b>Programming</b>							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
<b>Protection</b>							
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 Current Protection (O.C.P.)		Over load, short circuit and output current limit					
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 the UVP is activated.					
<b>General</b>							
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 Voltage DC Power Supply



Model		PCH1200-15H	PCH1200-20H	PCH1200-30H	PCH1200-40H	PCH1200-50H	PCH1200-60H
<b>Output</b>							
Rated output	Voltage	0~1500V	0~2000V	200~3000V	200~4000V	300~5000V	500~6000V
	Current	0~800mA	0~600mA	0~400mA	0~300mA	0~240mA	0~200mA
	OVP	100~1575V	200~2100V	200~3150V	200~4200V	300~5250V	500~6120V
Load regulation		CV≤0.5%+2LSB, CC≤0.5%+2LSB					
Line regulation		CV≤0.1%+2LSB, CC≤0.1%+2LSB					
Ripple & Noise		≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS	≤0.1% FS
Programming resolution	Voltage	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
	OVP	1V	1V	1V	1V	1V	1V
Display resolution	Voltage	1V	1V	1V	1V	1V	1V
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
Display accuracy		Voltage≤0.2%+2LSB, Current ≤0.5%+2LSB					
<b>Programming</b>							
Interface		RS232, RS485 and RS422					
Commands		ModBus-RTU					
<b>Protection</b>							
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 Current Protection (O.C.P.)		Over load, short circuit and output current limit					
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 the UVP is activated.					
<b>General</b>							
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.**