

PCH 5000V 5kV 2A 3A 5A 10A 15A High Voltage DC Power Supply 10kW to 75kW

Features

- ✓ PCH 5000V 5kV 2A 3A 5A 10A 15A High Voltage DC Power Supply
- ✓ Rated voltage 5000V (5kV)
- ✓ Negative polarity at request
- ✓ Rated power 10kW 15kW to 60kW 75kW
- ✓ Low ripple 0.1%FS rms
- ✓ List mode function
- ✓ Auto Run function
- ✓ Interlock loop function
- ✓ **No overshoot during startup**
- ✓ **Soft start by hardware, and adjustable voltage rise time by software**
- ✓ Constant voltage and constant current operations, auto CV/CC switch
- ✓ Multiple protections: OVP, OTP, ACF and current limit protections
- ✓ Standard interface: RS232 & RS485, support ModBus-RTU commands
- ✓ Options: DC 0-5V, 0-10V or 4mA interface for control and feedback
- ✓ Options: LAN interface

The PCH 5000V (5kV) series high-voltage and high-power DC power supplies achieve higher output voltages within the 10kW to 75kW power range. Featuring low ripple 0.1%FS, high reliability, and precise control over output voltage and current, the PCH 5000V (5kV) high voltage DC power supplies serve high-end applications ranging from component testing (high voltage/low current) to system integration, energy conversion, and testing of high-power equipment (high voltage/high current).

Typical high-voltage, high-power devices:

- 3000V discrete diodes
- 3300V IGBTs
- 4500V high-voltage, high-current IGBT modules
- 3300V SiC MOSFETs
- 5000V discrete diodes
- 5000V high-voltage rectifier diodes

Different power ranges cater to specific burn-in testing scenarios:

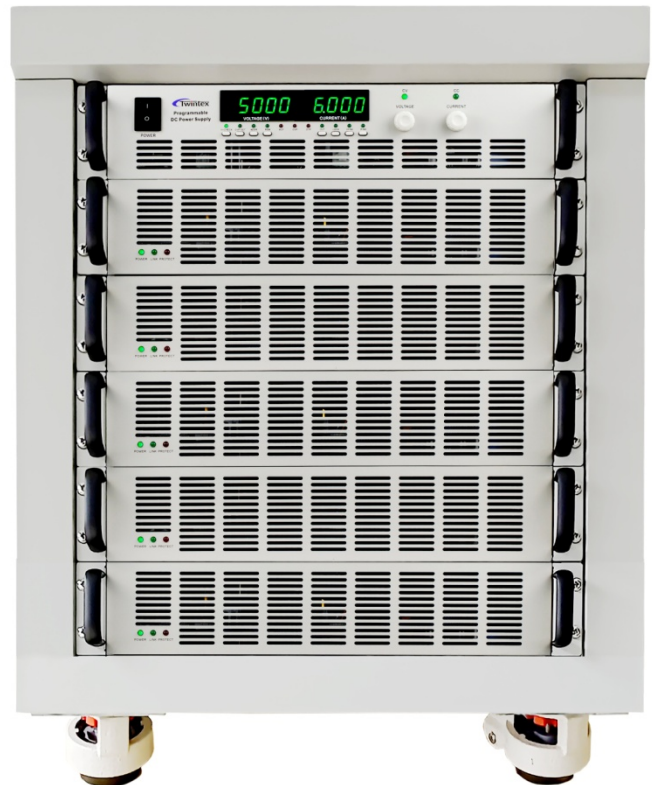
- **5000V 2A 3A DC Power Supplies (10kW-15kW):** Suitable for R&D validation or small-batch pilot production. Capable of simultaneously burn-in testing a small number (e.g., 1-2) of high-power modules or multiple (e.g., 4-8) medium-power devices; also suitable for rapid charging of power capacitors.
- **5000V 5A 6A 10A DC Power Supplies (30kW-50kW):** Suitable for medium-scale production lines. Capable of simultaneously burn-in testing a batch (e.g., 10-20) of standard power devices or 2-3 large modules.
- **5000V 12A 15A DC Power Supplies (60kW-75kW):** Suitable for large-scale mass production testing. Capable of batch burn-in testing (e.g., 20-40 or more devices), significantly enhancing testing efficiency.

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During burn-in testing, appropriate modes can be selected based on standards:

- **Constant Voltage (CV) Burn-in:** Set a fixed high voltage (e.g., 4500V) and monitors leakage current variations to evaluate device stability at rated voltage.
- **Constant Current (CC) Burn-in:** Set a fixed current and monitors voltage drift to test the stability of the power supply and device under constant current conditions.
- **Cyclic Burn-in:** Cycle the power supply between preset voltage and current levels to simulate voltage and current fluctuations encountered in real-world operating conditions.



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Model	Rated Output			Model	Rated Output		
	V	A	W		V	A	W
PCH10K-50H	5000V	0~2A	10kW	PCH10K-50HN	-5000V	0~2A	10kW
PCH15K-50H	5000V	0~3A	15kW	PCH15K-50HN	-5000V	0~3A	15kW
PCH20K-50H	5000V	0~4A	20kW	PCH20K-50HN	-5000V	0~4A	20kW
PCH25K-50H	5000V	0~5A	25kW	PCH25K-50HN	-5000V	0~5A	25kW
PCH30K-50H	5000V	0~6A	30kW	PCH30K-50HN	-5000V	0~6A	30kW
PCH35K-50H	5000V	0~7A	35kW	PCH35K-50HN	-5000V	0~7A	35kW
PCH40K-50H	5000V	0~8A	40kW	PCH40K-50HN	-5000V	0~8A	40kW
PCH45K-50H	5000V	0~9A	45kW	PCH45K-50HN	-5000V	0~9A	45kW
PCH50K-50H	5000V	0~10A	50kW	PCH50K-50HN	-5000V	0~10A	50kW
PCH60K-50H	5000V	0~12A	60kW	PCH60K-50HN	-5000V	0~12A	60kW
PCH65K-50H	5000V	0~13A	65kW	PCH65K-50HN	-5000V	0~13A	65kW
PCH70K-50H	5000V	0~14A	70kW	PCH70K-50HN	-5000V	0~14A	70kW
PCH75K-50H	5000V	0~15A	75kW	PCH75K-50HN	-5000V	0~15A	75kW
AC Input							
3φ4W (L1, L2, L3, PE), 380V±10% 47~63Hz (at default)							
3φ4W (L1, L2, L3, PE), 415V/440V/480V±10% 47~63Hz (at request)							