

High Voltage Power Supply

High voltage power supplies (HVPS), manufactured by FNM Co., are designed to be compact and lightweight, making them suitable for demanding laboratory and OEM applications such as capacitor testing, free-electron lasers, ion implantation, physical vapor deposition, capillary electrophoresis, electrospinning, ion-beam assisted deposition, and ion sources. These power supplies also feature a 1000:1 voltage monitor that is compatible with most common handheld voltmeters. Additionally, the capacitors are fully encapsulated in solid resin to protect against humidity and environmental factors.

FNM HVPSs series

D-RC Series	OC Series	OV Series
HV35P D-RC	HV35P OC	HV35P OV
HV50P D-RC	HV50P OC	HV50P OV
HV35N D-RC	HV35N OC	HV35N OV
HV50N D-RC	HV50N OC	HV50N OV

HV35P OC: High Voltage 35kV, Positive, OC series

- The **OV Series** only has an output voltage indicator with an accuracy of 0.1 kV.
- The **OC Series** includes an output voltage indicator (accuracy = ± 0.1 kV) and an output current display (accuracy = ± 1 micro-amp).
- The **D-RC Series** is equipped with a standard USB connector for digital remote control via the Windows Operating System, offering 10-bit resolution. This means that a maximum voltage of 50 kV is divided into 1024 segments, resulting in approximately 50 V per bit (50,000 V / 1024).

Typical Applications

- Electrospinning
- Capillary electrophoresis
- Capacitor testing
- CRT display testing
- Free-electron lasers
- Photomultipliers
- Ion sources
- Biasing
- Dielectric Testing
- Piezoelectric Drivers
- Electrostatic Chucks
- Sealing Applications
- Inkjet Printers
- Photo Detectors

Features:

High-Frequency Switch-Mode Circuit Design: The HVPS design topologies are based upon switch mode power conversion technology while operating at high frequencies. The "switcher" is the preferred design for many industrial and medical applications due to its desirable combination of high efficiency, small size, low weight, and increased safety for high-voltage supplies.

Arc Sensing Circuitry (Optional): Proprietary arc sensing circuitry will suppress arcing conditions that can occur in high-voltage applications, providing maximum safety and protection for both the power supply and the user.

Software: The D-RC Series High Voltage Power Supply includes control software and accessories, providing all the connectivity right out of the box. After installing the control software on a Windows-compatible computer, the D-RC HV unit is "plug and play". The user simply enters the desired output voltage and clicks the start button. The power supply is activated, and continuous read-back of the high voltage is displayed. The USB interface is accessed via a Windows USB driver through a standard communications port.

Specifications:

Weight: About 5 kg

Output: Continuous, stable adjustment, from 0 to the desirable voltage by panel-mounted 10-turn potentiometer (OC and OV series) or by a digital volume (D-RC Series).

Dimensions: OC and OV: 34 × 38 × 12 cm, D-RC: 34 × 43 × 12 cm

Input: 100-240 V AC, single-phase

Power: 25 Watt

Working Temperature: -5 to +45 °C

Voltage Monitoring: Accuracy: 0.1 kV

Current Monitoring (OC and D-RC series): Accuracy: 1 μ A

Arc detector: in D-RC series

Polarity: Available either positive or negative

Warranty: 1 year for manufacturing defects

These HVPS are not suitable for producing sparks and plasma.



DRC Series



OV Series



OC Series