

High Voltage Power Supply

High voltage power supplies (HVPSs), manufactured by Fanavaran Nano-Meghyas Co. Ltd. (FNM Co.) offer small and lightweight packages, making them suitable for demanding laboratory and OEM applications such as capacitor testing, free-electron laser, ion implantation, physical vapor deposition, capillary electrophoresis, electrospinning, ion-beam assisted deposition, and ion sources. These supplies also feature a 1000:1 voltage monitor, scaled to match most common handheld voltmeters. The capacitors are fully embedded in solid resin for protection.

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

OV Series only have output voltage indicator (Accuracy = 0.1 kV).

OC series have output voltage indicator (Accuracy = 0.1 kV) and output current display (Accuracy = 1 micro-amp).

D-RC Series have a standard USB connector for digital remote control via windows Operating System with 10 bit resolution which means that 50kV (max) would be divided into 1024 segments. In this case, 50,000/1024 which is approximately 50V per bit.

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: HVPS design topologies are based upon switch mode

power conversion technology, while operating at high frequencies. The “switcher” is the design of choice for many industrial and medical applications because of its desirable combination of high efficiency, small size, and low weight as well as increased safety for high voltages supplies.

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

Software: The DRC Series High Voltage Power Supply includes, control software and accessories, providing all the connectivity needed right out of the box. After the control software has been installed on a Windows compatible computer, the DRC HV unit is “plug and play”. The user 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 by a Windows USB driver through a standard communications port.

Specifications:

Weight: about 5 kg (35 and 50 kV) and 7 kg (more than 50 kV)

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 (DRC Series).

Dimensions: OC and OV: 34x38x12 cm, D-RC: 34x43x12 cm

Input: 100-240 V AC, single-phase

Power: 35 Watt

Working Temperature: -5 to +45 °C

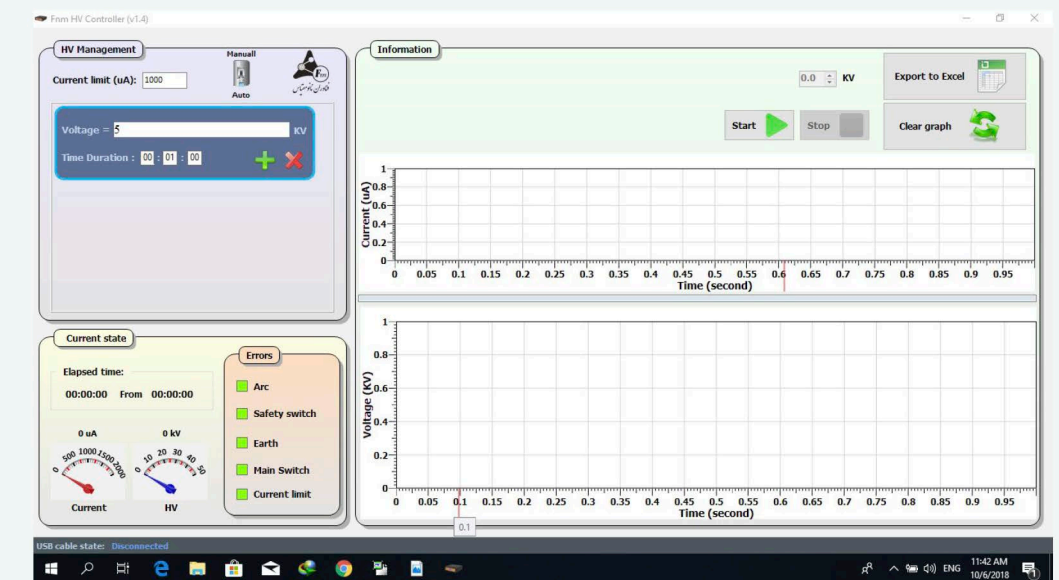
Voltage Monitoring: Accuracy: 0.1 kV

Current Monitoring (OC and DRC series): Accuracy: 1 μA

Arc detector: in DRC series

Polarity: Available either positive or negative

Warranty: 1 year for manufacturing defects



DRC Series



OV Series



OC Series