



Pegasus P600/P900 Range

300W, 600W, 900W 19" rack power supply for general purpose

P600/900 - Remote control panel available



Optional - With local control panel



Specification Summary

DC High Voltage Power Supplies suitable for laboratory and industrial use. The option of grid and filament outputs make this range of supplies suitable for electron beam systems and x-ray applications. Standard remote control is by analogue signals, should other controls be preferred please discuss this with our technical staff. Available in a standard 19-inch rack. Reduced weight and ease of serviceability is ensured, as the supplies are air insulated below 20kV.

Capacitor Charging Option:

The Pegasus range can be adapted to suit capacitor charging applications at low to moderate PRF.

Input specifications

AC input voltage range	220 - 240VAC
Input frequency	50 - 60Hz

Input current

For P900: 4.7A maximum. At full power and minimum input voltage

Nominal efficiency at full load

Better than 80%

Output specifications

Model No.	P300/15	P300/20	P300/30	P300/40	P300/50
Insulation	Air		Encapsulated		
Available output voltages	15kV	20kV	30kV	40kV	50kV
Maximum output current	20mA	15mA	10mA	7.5mA	6mA
Output power	0 to 300W				

Model No.	P600/15	P600/20	P600/30	P600/40	P600/50
Insulation	Air		Encapsulated		
Available output voltages	15kV	20kV	30kV	40kV	50kV
Maximum output current	40mA	30mA	20mA	15mA	12mA
Output power	0 to 600W				



Model No.	P900/15 P900/20	P900/30 P900/40 P900/50
Insulation	Air	Encapsulated
Available output voltages	15kV 20kV	30kV 40kV 50kV
Maximum output current	60mA 45mA	30mA 22.5mA 18mA
Output power	0 to 900W	

Output polarity	Positive or negative with respect to ground. Please specify
Load regulation	Not more than 100ppm of maximum rated output voltage for 10% to maximum output current change
Line regulation	Not more than 100ppm of maximum rated output voltage for $\pm 10\%$ input line change
Voltage ripple	Better than 0.05% (peak to peak) of maximum output voltage
Temperature coefficient	Typically not more than 100ppm of maximum output per °C

Protection

Safety interlocks:

There is a safety interlock to enable or disable high voltage output. It is available on the external control interface.

Circuit protection:

In overload, arcing or short-circuit situation, the power supply trips.

Controls

Control panel:

Front panel



1	ON/OFF switch	Switching mains input
2	POWER	Indicates when mains power is on
3	HV	Indicates when HV is on

Back panel



1	D Conn	15 way D connector for analogue remote control
2	UHF Conn	High voltage output connector
3	IEC	Standard IEC mains socket
4	GND	M6 for earth bonding

Control interface

The Pegasus P300/600/900 power supplies can be controlled by connecting external control interface to D Connector. Genvolt can also supply the specially designed control panel. This is available as



having full digital metering facilities and includes a remote interface.

The control signals are standard 0-10V and it is thus possible for the user to employ any suitable control system as an alternative to the control panels. Genvolt's flexible approach makes it possible to produce variants on the above designs, usually in short time frames.

An interlock key switch is also provided on the front panel of the control unit. A facility for an external interlock loop is also included.

Remote interface is a standard 19" 2U rack. The signals are as follows:

Function	Description
HV monitor	Digital display for output voltage
mA monitor	Digital display for output current
HV demand setting	Input demand voltage by adjusting the potentiometer
mA demand setting	Input demand current by adjusting the potentiometer
Key switch	Enables HV output
HV ON/OFF switch	Turning HV on or off
HV On report	LED indicates when HV is enabled
Remote Status Report	LED indicates local/remote control
LOAD EN	LED indicates load enable signal
PFC PFW	LED indicates when there is a power factor corrector power fail warning
ENG.	Infra red maintenance data port

For further information about the remote control panel please contact Genvolt.

Environmental details

Operating temperature	0 to 35°C
Storage temperature	0 to 60°C
Relative humidity	Operating at 30% to 80%. Do not store the unit at above 95% humidity.

Mechanical details

Weight	Approx. 11kg
Dimensions	482.6mmX88.1mmX478.2mm
Power input connector	Standard IEC connector
HV output connector	UHF Type Connector
Control interface connector	15 way D connector



Model number

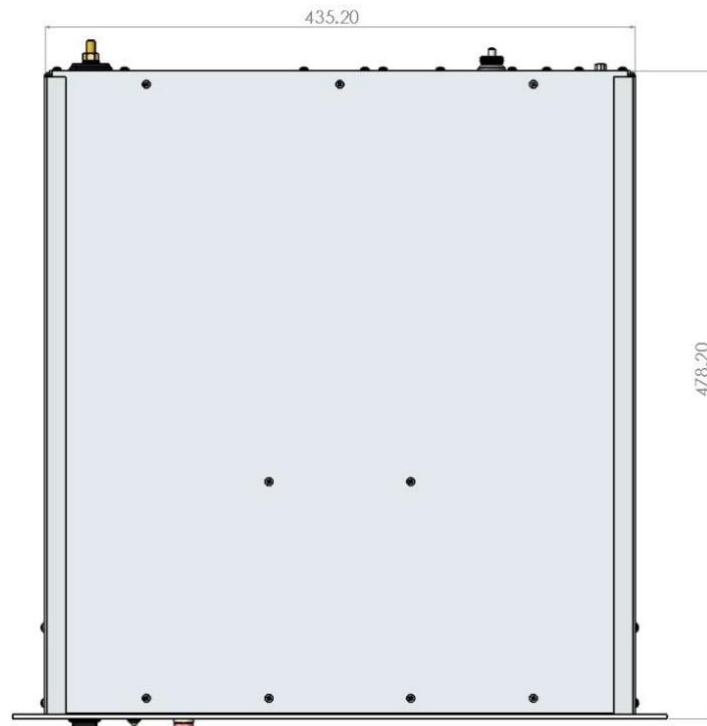
Model Output power
P600/15 Output voltage

Regulatory approvals

Pegasus power supplies are in conformity of RoHS compliant and CE marks.

Dimensions

Pegasus P300/P600/900



Control panel (optional)



For requirements other than those specified, please do not hesitate to contact Genvolt.