



Innovator In Spectroscopy Equipment

PHV2418



**PRECISION HIGH
VOLTAGE ±5KV 300µA
MODEL PHV2418**

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CATALOG



DOSIMETERS



FREE DOWNLOAD

PRECISION HIGH VOLTAGE $\pm 5\text{KV}$ $300\mu\text{A}$ MODEL PHV 2418

Features

- Compact single width NIM package
- Regulated up to $\pm 5000\text{V}$ dc $300\mu\text{A}$ output
- Internally selecting negative or positive polarity
- Noise and ripple $< 10\text{mV}$ peak to peak
- Overload and short circuit protected
- inhibit status indicator
- 0.96 color OLED Digital Display
- High stability
- Ultra reliable industry standard design
- 100mV display resolution

Digital Display
Low noise & Ripple
 V_r p-p = 10mV



Description

The CFP Model PHV2418 High Voltage Power Supply is a single-width NIM module designed primarily for use with photo-multiplier and electron multiplier tubes. But it can be used with any detector requiring a bias voltage up to 5000 V and a current level of 300 μ A or less. The 2418 allows the user to select from two continuously adjustable outputs, ranging from ± 40 to ± 5000 V dc. The output voltage is measured and displayed with a digital display. The 2418 unit are fully arc and short circuit protected and will limit continuous short circuit output current to less than 120% of maximum rated output current.

Specifications

Inputs

Input Power

The Model **PHV2418** is powered from a standard NIM Bin and power supply

Inhibit

TTL Logic High inhibits the HV outputs; min logic High ≥ 2.5 V ; max Logic Low ≤ 0.4 V

Outputs

5kV HV Output

± 40 to ± 5000 V dc, continuously adjustable, 300 μ A output current

500V HV Output

± 4 to ± 500 V dc, continuously adjustable

Controls

ON/OFF

Front panel toggle switch enables or disables output

Voltage dial axis

Front panel Multi turn controls switch continuous adjustment of the output voltage

Indicators

POS

Front-panel LED is lit when the bin power is on, if the positive output polarity has been selected

NEG

Front-panel LED is lit when the bin power is on, if the negative output polarity has been selected

Inhibit

LED indicates Inhibit status

Display

Digital panel for voltage display and other working conditions display.

Performance

Bias voltage polarity

Positive or negative

Internally selectable. Polarity indicated by front-panel LEDs whenever bin power is on

Rated output current

0–300 μ A

Voltage Regulation

Line : $\pm 0.001\%$ of rated output voltage for a +1% input line change

Load : $\pm 0.001\%$ of rated output voltage for a full load change

Ripple

≤ 10 mV peak-to-peak from 5 Hz to 50 MHz

Stability

$\leq 0.01\%$ per hour, 0.08% per 8 hours, after a $\frac{1}{2}$ hour warm up

Temperature coefficient

≤ 50 ppm/ $^{\circ}$ C

Other

Humidity

20% to 85% RH, non-condensing

Output Connector

2 SHV connector for 5KV and 500V outputs

Cooling

Convection cooled

Arc/Short Circuit

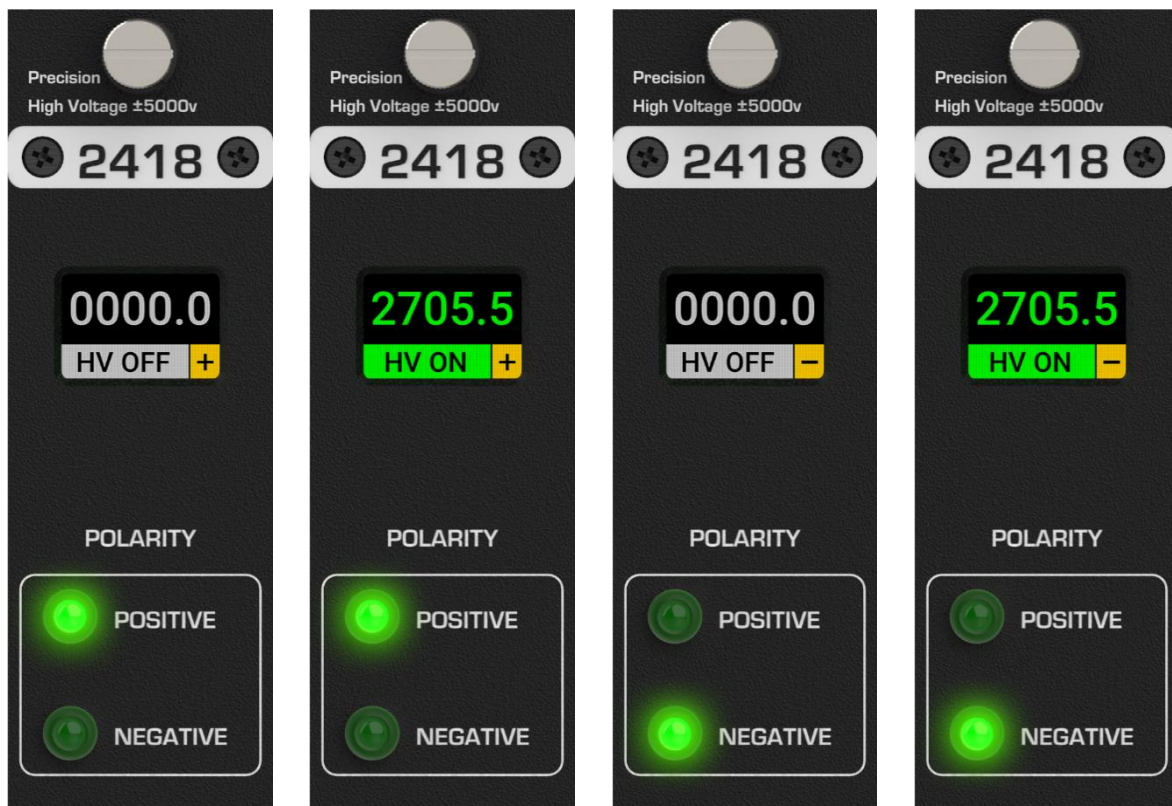
All units are fully arc and short circuit protected and will limit continuous short circuit output current to less than 150% of maximum rated output current.

Application

- Aerospace
- Ion sources
- Electrostatics
- Insulation test
- Photomultipliers
- X-ray fluorescence
- Particle accelerators
- Electron microscopes
- Nuclear fusion research
- Gas discharge/sputtering
- Secondary electron multiplier
- Medical
- Imaging
- Satellite
- Scientific
- Cable testing
- Spectrometry
- Military/defense
- Threat detection
- Gamma detectors
- Radiation detection
- Consumer/industrial

Typical applications for high voltage power supplies

- Gas discharge tube biasing
- Electrostatic precipitation
- Radiation detection
- Charging particles
- Ozone generation
- Air ionizers



Electrical and Mechanical

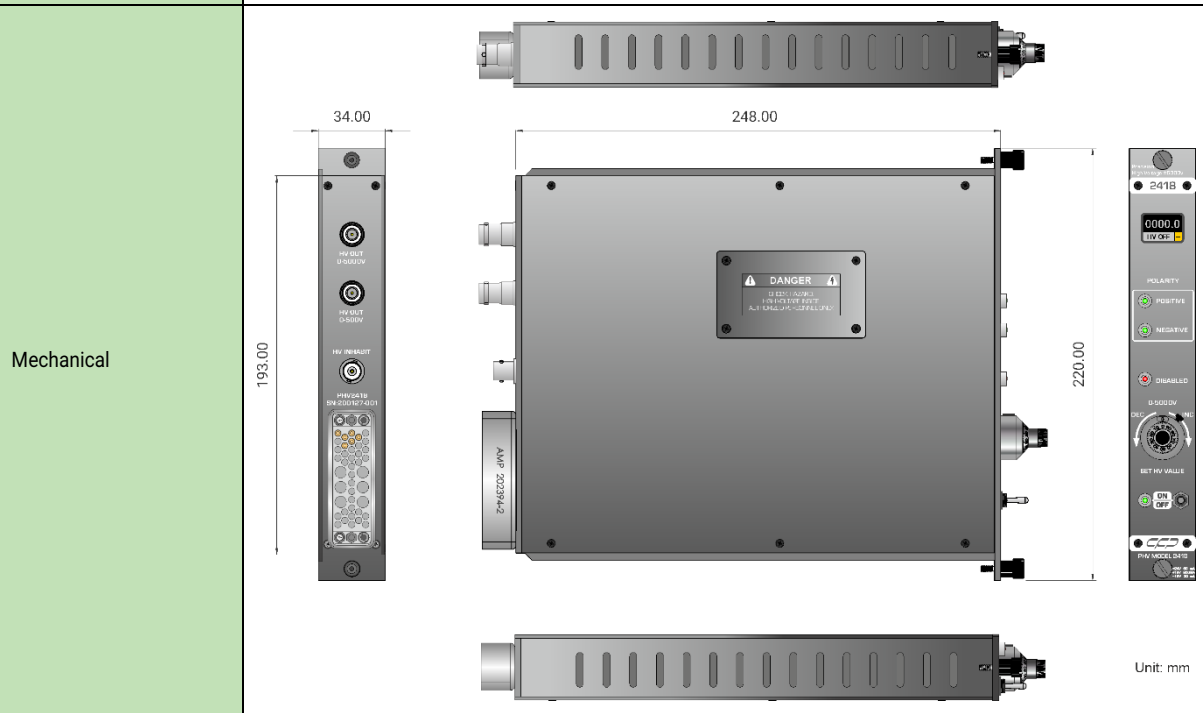
Unit: PHV2418

Electrical

Power required	Its power from a NIM bin power supply. Required dc voltages and currents are +24 V, 80 mA; +12 V, 400mA; and -12 V, 10 mA.
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Physical

Dimensions (L x W x H)	220mm x 34mm x 248mm (L x W x H)
Net Weight	1.150kg
Box Weight	1.360kg



Environmental

Storage temperature	- 10°C to + 50°C
Operating temperature	0°C to +50°C
Relative humidity	< 80%

Software and user interface

The device doesn't have any software


Ordering info




PHV2418 Standard package includes

Part #	Image	Description
PHV2418 main		PRECISION HIGH VOLTAGE $\pm 5KV$ 300 μA
ACCE2418001		CD User guide (1 Pack)
ACCE2418002		box with bubble plastic insert (1 Pack)
ACCE2418003*		Guaranty (one year)

* =we stand behind our products. We guarantee your satisfaction in the quality of our instruments by providing a complete one-year warranty covering any defect of workmanship, material, and/or design. If our products do not perform, we will provide complete repair and/or replacement. for guaranty conditions, please refer to manual device (PHV2418 - Manual)

Optional accessories and services

Part #	Image	Description
ACCE2418004		Installation
ACCE2418005		Training
ACCE2418006**		Re-Calibration (interval) services. 1year factory maintenance suggested, not required
ACCE2418011		BNC terminator 50 Ω
ACCE2418012		RG58A/U, 50 Ω cable with two BNC male plugs
ACCE2418013		RG59, 50 Ω cable with two SHV male plugs
ACCE2418014		Conn housing plug 50POS AMP connectors
ACCE2418015		Conn pin hood int 50pos panel MT
ACCE2418016		Guide pin 4-40

ACCE2418017		TE connectivity AMP connectors multimate, type II series pin
ACCE2418018		Bin guide pin
ACCE2418019		Guide socket

** = The proper maintenance & calibration of your instruments is critical to ensure proper performance & accuracy. for Re-calibration (interval) services, please call with CFP company (021- 4604538)





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