POSITIVE PERCICION HIGH VOLTAGE

Features:

- Compact single width NIM package
- Regulated up to +5000 V dc 500µA output for negative and positive separately.
- Noise and ripple ≤10mV peak to peak
- Overload and short circuit protected
- Overload, inhibit status indicators
- Inhibit and overload latching circuits
- Four digit front panel meter
- CFP Instrument Control Bus (optional)
- LAN, USB, RS232, RS485 ICB available

Description:

The CFP Model 2039 High Voltage Power Supply is a single-width NIM module designed primarily for use with photomultiplier 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 $500 \,\mu$ A or less.

The 2039 allows the user to select from two continuously adjustable outputs, ranging from +15 to +5000 V dc. The output voltage is measured and displayed by a four-digit voltmeter. In addition, this unit allows the user has fully separately positive and negative output voltage polarity. The 2039 unit are fully arc and short circuit protected and will limit continuous short circuit output current to less than 150% of maximum rated output current.

Specifications:

INPUTS

INPUT POWER The Model 2039 is powered from a standard NIM Bin and power

supply.

INHIBIT TTL Logic low or ground inhibits the HV outputs; max logic low ≤0.4 V;

logic high ≥2.5 V.

OUTPUTS

HV OUTPUT +15 to +5000 V dc, continuously adjustable, 500 μ A output current

INDICATORS

HV OUTPUT 4-digit panel meter 0 to 5000 V.

INHIBIT LED indicates Inhibit status.

OVERLOAD LED indicates overload status.

CONTROLS

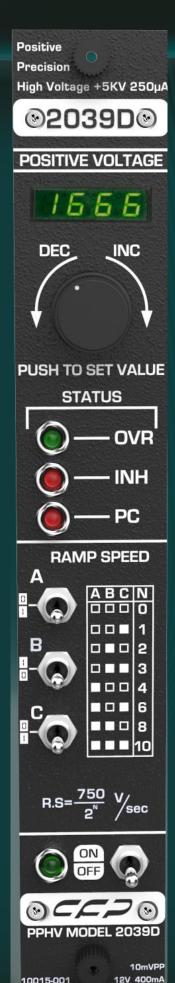
ON/OFF Front panel toggle switch enables or disables output.

VOLTAGE Front panel Multi turn controls switch continuous adjustment of the

output voltage.

Remote Control Model 2039 have provisions for remote high voltage output control via

an USB port





POSITIVE PERCICION HIGH VOLTAGE

Performance:

Voltage Regulation

Line ±0.001% of rated output voltage for a +1% input line change
Load ±0.001% of rated output voltage for a full load change

Ripple See 10mVpp table

Stability ≤0.005% per hour, 0.02% per 8 hours, after a ½ hour warm up

Temperature

Temperature Coefficient $\leq 50 \text{ppm}/^{\circ} \text{ C}$ Operating Temperature $0^{\circ} \text{ C to } +50^{\circ} \text{ C}$ Storage Temperature: $-40^{\circ} \text{ C to } +85^{\circ} \text{ C}$

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.

Other

Humidity: 20% to 85% RH, non-condensing **Interface Connector:** LAN, USB, RS232, RS485

VOLTAGE Front panel Multi turn controls switch continuous adjustment of the

output voltage.

Output Connector:SHV connectorCooling:Convection cooled.

ELECTRICAL AND MECHANICAL POWER REQUIRED

TYPICAL POWER REQUIREMENTS

Standard version +12V - 450mA, -12 V - 450mA

PHYSICAL

SIZE: Single width NIM module 3.43 X 22.12 cm (1.35 X 8.71 inches) per TID-20893 (rev.) NET **WEIGHT**: 0.9kg (2.0lbs.) - SHIPPING WEIGHT - 2.2 kg (4.9 lbs.)

ACCESSORIES included

LAN, USB, RS232, RS485 cable (opt),

PPHV2039D Rev1.0 10015-001

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT NUMBER	RIPPLE (VPP)
PPHV2039	0 to +500	O to +8ma	2POS	5mv
PPHV2039A	0 to +1000	O to +4ma	2POS	4mv
PPHV2039B	0 to +2000	0 to +2ma	2POS	2mv
PPHV2039C	0 to +3000	O to +1ma	2POS	6mv
PPHV2039D	0 to +5000	0 to +500µa	2POS	10mv
PPHV2039E	0 to +7500	0 to +250µa	2POS	100mv



