

HVM Series DC-DC High Voltage Module

DC 100V – 100kV Output, DC 5-48V Input

TECHNOLOGY

Our core R&D team consists of iNARTE certified ESD / EMC Engineers with in-depth knowledge and decades of experience. We also have a long-term, joint development relationship with top academic research groups in the world.

RELIABILITY

Our products are built with elaborate designs and quality parts. All products are tested under stringent reliability conditions before being released.

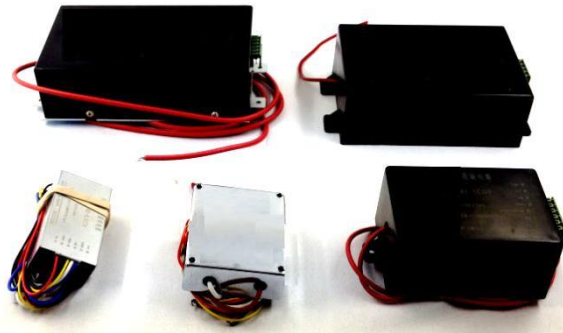
SUPPORT

Our excellent support team guides you from selection to application to create the best solution for every customer.

SERVICE

We offer anytime return or trade in, fast repair during warranty period and lifetime technical supports.

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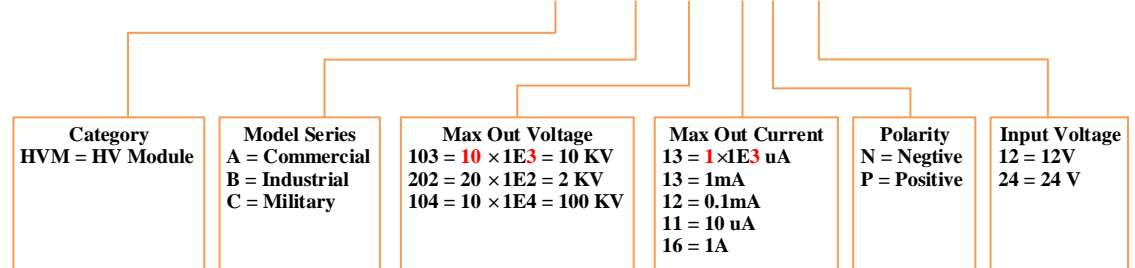


Features:

- Low cost
- Easy configuration
- Light weight and size
- Highly efficient DC-DC supply
- Overcurrent protection
- Short circuit protection
- Max ripple $V_{pp} < 0.1\%$
- Long well insulated output wire

Order Model Number: (for detail specification options, check the next page)

HVM - A 103 . 13 P 12



Note: Not all combinations are available, please contact us!

Specifications:

- Power input 5-48 VDC ($\pm 10\%$)
- Analog control 0 to +5 V
- Voltage output 0 to +100kV
- Load regulation $< 0.5\%$
- Max ripple voltage $< 0.1\%$
- Time drift $\leq 0.1\%$ per hour (After 30 minutes of operation)
- Temperature drift $\leq 0.1\%$ per $^{\circ}\text{C}$

Applications:

- High voltage supply
- Electrostatic discharge testing
- Electrostatic applications

Work Conditions:

- Temperature -10 to + 50 $^{\circ}\text{C}$
- Humidity 0% - 70% RH

Dimension / Weight (Typical):

- **2kV/1mA out, 12V**
70x38x25 mm (2.8x1.5x1 inch)
0.14 kg (0.3 lb)
- **6kV/1mA out, 12V**
76x64x25 mm (3.0x2.5x1 inch)
0.3 kg (0.65 lb)
- **10kV/1mA out, 12V**
100x70x50 mm (3.9x2.75x2 inch)
0.55 kg (1.2 lb)
- **30kV/1mA out, 24V in**
180x100x50 mm (7.5x3.9x2 inch)
1.1 kg (2.5 lb)
(Note different sizes will be used for different power levels, the smallest module being 38 x 38 x 20 mm)

Support:

- Lifetime Technical Support

Service:

- 1 Year Warranty

HVM Model Detail Specification / Options:

Product Grade

Class	Details
A - Commercial Grade (Default)	-10 to + 50 °C Partially low drift, high precision components
B - Industrial Grade	-25 to + 65 °C Fully low drift, high precision components
C - Military Grade	-40 to + 85 °C Fully military grade components Shake resist, water resist, smoke resist

Output Voltage / Output Current Reference Table

OUTPUT VOLTAGE (TYPICAL)	OUTPUT CURRENT (TYPICAL)				OUTPUT CURRENT (MAX)
DC 100V	10mA	100mA	500mA	1A	5A
DC 200V	10mA	100mA	500mA	1A	5A
DC 300V	5mA	100mA	500mA	1A	3A
DC 400V	5mA	100mA	500mA	1mA	2A
DC 500V	1mA	100mA	500mA	1A	2A
DC 600V	1mA	50mA	100mA	500mA	1A
DC 800V	1mA	50mA	100mA	500mA	1A
DC 1000V	1mA	50mA	100mA	500mA	1A
DC 1200V	1mA	50mA	100mA	500mA	1A
DC 1500V	1mA	50mA	100mA	500mA	1A
DC 2000V	1mA	10mA	50mA	100mA	500mA
DC 2500V	1mA	10mA	50mA	100mA	500mA
DC 3000V	1mA	10mA	50mA	100mA	300mA
DC 3500V	1mA	10mA	50mA	100mA	200mA
DC 4000V	1mA	10mA	50mA	100mA	200mA
DC 4500V	1mA	10mA	50mA	100mA	200mA
DC 5000V	1mA	10mA	50mA	100mA	200mA
DC 5500V	1mA	10mA	50mA	100mA	200mA
DC 6000V	1mA	5mA	10mA	50mA	160mA
DC 6500V	1mA	5mA	10mA	50mA	160mA
DC 7000V	1mA	5mA	10mA	50mA	140mA
DC 8000V	1mA	5mA	10mA	50mA	120mA
DC 9000V	1mA	5mA	10mA	50mA	100mA
DC 10 kV	1mA	5mA	10mA	50mA	90mA
DC 15 kV	1mA	5mA	10mA	50mA	60mA
DC 20 kV	1mA	2mA	5mA	10mA	50mA
DC 25 kV	1mA	2mA	5mA	10mA	40mA
DC 30 kV	1mA	3mA	5mA	10mA	30mA
DC 35 kV	1mA	2mA	5mA	10mA	20mA
DC 40 kV	1mA	2mA	5mA	10mA	20mA
DC 45 kV	1mA	2mA	5mA	10mA	20mA
DC 50 kV	1mA	2mA	5mA	10mA	20mA
DC 60 kV	1mA	2mA	3mA	5mA	10mA
DC 80 kV	1mA	2mA	3mA	5mA	10mA
DC 100 kV	1mA	1.5mA	2mA	3mA	4mA

(Please note, this is the option reference, please contact us to discuss more details or customized values)

Input Voltage / Output Current Reference Table

INPUT VOLTAGE	OUTPUT VOLTAGE / CURRENT (TYPICAL)	MAX OUTPUT POWER (TYPICAL)
DC 5V	100V、5mA 3 kV、1mA	≤5W
DC 6V	100V、5mA 3 kV、1mA	≤5W
DC 9V	100V、20mA 5 kV、2mA	≤20W
DC 12V	100V、1A 30 kV、2mA	≤100W
DC 15V	100V、1.2A 30 kV、3mA	≤120W
DC 18V	200V、700mA 30 kV、4mA	≤150W
DC 24V	200V、1A 50 kV、2mA	≤200W
DC 28V	200V、1.2A 50 kV、4mA	≤250W
DC 36V	300V、1A 50 kV、5mA	≤300W
DC 48V	500V、1A 60 kV、4mA 100 kV、2mA	≤500W

(Please note, this is an option reference, please contact us to discuss more details or customized applications.
The HV module dimension increases as the max output power increases)