

HTP-CPS

HIGH VOLTAGE MODULES



POSITIVE PROBLEM SOLVING **+ =**

The HTP-CPS are high voltage PSUs with a variety of outputs ranging from 500V to 30kV. Rated between 9-12W these units provide a very stable output with low ripple and noise.

The output voltage and current limits are set over the analogue interface. The V & I values can also be monitored and the output enabled. As standard the HTP-CPS units are built into compact metal cases with the output provided via a 600mm bare ended HV cable. Different lead lengths and output connectors such as SHV and CPE can be provided on request.

- + Available in 3U Cassette or Compact Box
- + Can be Used in HTP-THQ Series
- + High Voltages up to 30kV
- + Stable Output Voltage
- + Very Low EMI

FURTHER DETAILS

If rack mounting is required then modules with output voltages up to 20kV can be optionally built as 3U high cassettes. Each 3U module is fitted with an ID chip to allow automatic detection by an MMC interface card. Up to 10 cassettes can be slotted into a single AC powered rack. For remote control these multi channel systems can be built with a CAN interface.

SELECTION TABLE

Part Number	Maximum Power	Input Voltage	Output Voltage Range	Output Current Range
HTP-CPx 05 206 24 5	10W	24 V	0 - 0.5kV	0 - 20mA
HTP-CPx 10 106 24 5	10W	24 V	0 - 1kV	0 - 10mA
HTP-CPx 15 805 24 5	12W	24 V	0 - 1.5kV	0 - 8mA
HTP-CPx 20 605 24 5	12W	24 V	0 - 2kV	0 - 6mA
HTP-CPx 30 405 24 5	12W	24 V	0 - 3kV	0 - 4mA
HTP-CPx 40 305 24 5	12W	24 V	0 - 4kV	0 - 3mA
HTP-CPx 50 205 24 5	10W	24 V	0 - 5kV	0 - 2mA
HTP-CPx 70 155 24 5	10.5W	24 V	0 - 7kV	0 - 1.5mA
HTP-CPx 100 105 24 5	9W	24 V	0 - 10kV	0 - 1mA
HTP-CPx 150 604 24 5	9W	24 V	0 - 15kV	0 - 0.6mA
HTP-CPx 200 504 24 5	9W	24 V	0 - 20kV	0 - 0.5mA
HTP-CPx 300 304 24 5	9W	24 V	0 - 30kV	0 - 0.3mA

Replace 'x' in the part number with P for positive or N for negative output polarity.

TECHNICAL DATA

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Stability (ΔV_{IN})	$< 1 \times 10^{-4} \times V_{OMAX}$
Stability (ΔP_{LOAD})	$< 2 \times 10^{-4} \times V_{OMAX}$
Ripple & noise (typical)	$< 2 \times 10^{-5} \times V_{OMAX}$
Ripple & noise (max)	$< 5 \times 10^{-5} \times V_{OMAX}$
Temperature coefficient	$< 1 * 10^{-4} /K$
Remote control	0 - 5V (0 - 10V option)
Protection	Overload and short circuit, INHIBIT signal, current and voltage limit
Case	Metal box or 3U cassette (Up to 20kV)
Dimensions ($V_o \leq 7kV$)	75 x 155 x 40mm (W x D x H)
Dimensions (7kV < $V_o \leq 20kV$)	75 x 185 x 40mm (W x D x H)
Dimensions (20kV < V_o)	95 x 185 x 40mm (W x D x H)
Dimensions ($V_o \leq 15kV$)	3U x 8HP (40.64mm) cassette option
Dimensions (15kV < $V_o \leq 20kV$)	3U x 16HP (81.3mm) cassette option
Supply voltage V_{IN}	24VDC \pm 5%
Output polarity	Factory fixed (x = P - Positive, x = N - Negative)
INHIBIT	TTL Low
Output Connection	600mm cable

OPTIONS

CODE	DESCRIPTION
/P	Positive output polarity (factory fixed)
/N	Negative output polarity (factory fixed)
/AI-10	0 - 10 VDC Analogue interface for control and measurement
/3U-SHV	Unit built as 3U x 8HP cassette with SHV connector for $\leq 6kV$
/3U-LEMO	Unit built as a 3U x 8HP cassette with LEMO connector for 7 to 15kV and a 3U x 16HP for 20kV
/ECH 124	Unit placed in 4 slot mainframe (see below for more information)
/ECH 128	Unit placed in 8 slot mainframe (see below for more information)
/ECH 12A	Unit placed in 10 slot mainframe (see below for more information)

MAINFRAMES

Part Number	Slots	Power	Interface	Dimensions (W x H x D)
HTP-ECH 124	4 + 1	120W	CAN & USB	½19" x 3U x 350mm
HTP-ECH 128	8 + 1	300W	CAN & USB	19" x 3U x 350mm
HTP-ECH 12A	10 + 1	300W	CAN & USB	19" x 3U x 350mm
Option ETH	Integrated ethernet interface with 32 inputs and 16 outputs			

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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