

# HTP-VHS-4

## MULTI CHANNEL HV MODULES IN VME



POSITIVE PROBLEM SOLVING **+ =**

**This range of High Voltage modules designed for VME applications offers versions with voltages up to 10kV & currents up to 15mA.**

Versions with 2, 4 or 12 channels per unit are available and populate either 1 or 2 slots in the mainframe. Each channel is fully controllable via the VME interface. Current trip points can be programmed with a time delay. A comprehensive set of protection circuitry includes safety loop and ramp down. For the 12 channel versions the units can be optionally built with an INHIBIT function for each channel.

- + All Channels with Voltage & Current Regulation**
- + Hardware Current & Voltage Limit per Module**
- + Each Channel Fully Controllable via Interface**
- + Low Ripple & Noise (<10mV<sub>p-p</sub> up to 4kV)**
- + All Channels with Common GND**

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### SELECTION TABLE

Part Number	Output Voltage Range	Output Current Range	Number of Channels
HTP-VHS 40-01x-106	0 - 100V	0 - 10mA	4 Channels
HTP-VHS C0-01x-106	0 - 100V	0 - 10mA	12 Channels
HTP-VHS 40-05x-156	0 - 500V	0 - 15mA	4 Channels
HTP-VHS C0-05x-106	0 - 500V	0 - 15mA	12 Channels
HTP-VHS 40-10x-805	0 - 1kV	0 - 8mA	4 Channels
HTP-VHS C0-10x-605	0 - 1kV	0 - 8mA	12 Channels
HTP-VHS 40-20x-405	0 - 2kV	0 - 4mA	4 Channels
HTP-VHS C0-20x-305	0 - 2kV	0 - 4mA	12 Channels
HTP-VHS 40-30x-305	0 - 3kV	0 - 3mA	4 Channels
HTP-VHS C0-30x-205	0 - 3kV	0 - 3mA	12 Channels
HTP-VHS 40-40x-205	0 - 4kV	0 - 2mA	4 Channels
HTP-VHS C0-40x-155	0 - 4kV	0 - 2mA	12 Channels
HTP-VHS 40-60x-105	0 - 6kV	0 - 1mA	4 Channels
HTP-VHS C0-60x-105	0 - 6kV	0 - 1mA	12 Channels
HTP-VHS 40-80x-105	0 - 8kV	0 - 1mA	4 Channels
HTP-VHS 20-100x-507	0 - 10kV	0 - 0.5mA	2 Channels

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

Different output ranges and application/user specific options are possible. Please contact ETPS Ltd to discuss your requirements.



## TECHNICAL DATA

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Ripple & Noise	<5mV <sub>P-P</sub> (100V models); <10mV <sub>P-P</sub> (500V to 4kV models); <30mV <sub>P-P</sub> (6 to 20kV models)
Hardware Limits (Current)	Potentiometer per module
Hardware Limits (Voltage)	( $I_{MAX} / V_{MAX}$ is the same for all channels)
Interface	VME interface
Voltage Setting & Measurement Resolution	$2 \times 10^{-6} \times V_{NOM}$
Current Setting & Measurement Resolution	$2 \times 10^{-6} \times V_{NOM}$
Hardware Current Trip Resolution	$10^{-5} \times I_{NOM}$
Accuracy of Voltage Measurement	$\pm (0.01\% \times V_O + 0.02\% \times V_{NOM})$ for one year
Accuracy of Current Measurement	$\pm (0.01\% \times I_O + 0.02\% \times I_{NOM})$ for one year
Rate of Voltage Change	Up to 0.2 (option up to 0.75) $\times V_{NOM}/s$
Safety Loop (2 Pole Lemo Connector)	5mA < IS < 20mA: module "on"    IS < 0.5mA: module "off"
Power Requirements $V_{IN}$	$\pm 12V$ (< 1.8A/5A) and +5V (<400mA)
HV Connector (4 Channel Units)	SHV connectors
HV Connector (12 Channel Units)	51 pin Redel HV connector
Mechanical construction	4 channels up to 6kV in 6U $\times$ 4HP $\times$ 160mm (1 slot width) 2 channels with 10kV in 6U $\times$ 8HP $\times$ 160mm (2 slot width) 12 channels in 6U $\times$ 8HP $\times$ 160mm (2 slot width)

## OPTIONS

CODE	DESCRIPTION
/VME195	Unit placed in Mini-VME mainframe (see below for more information)
/VME 620	Unit placed in VME mainframe (see below for more information)
/VME 621	Unit placed in VME mainframe (see below for more information)
/VME 622	Unit placed in VME mainframe (see below for more information)

## 19" MAINFRAMES

Part Number	Backplane	+5V	+12V	-12V
HTP-Mini-VME 195	VME/VME64	45A	23A	23A
HTP-VME 620	VME/VME64	115A	46A	46A
HTP-VME 621	VME/VME64	230A	46A	46A
HTP-VME 622	VME/VME64	345A	46A	--

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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