

# HTP-SHQ

## HIGH PRECISION HV DESKTOP PSU



POSITIVE PROBLEM SOLVING **+ =**

The HTP-SHQ range is ideal for applications where precision and stability are paramount. Both single and dual channel versions are built into a compact desktop case.

If a dual output unit is required both channels can be independently adjusted up to the unit's maximum power. The HV output can be held or enabled and the output polarity switched from the front panel. The 6 digit display has 2 ranges which provide excellent resolution of 1nA in the lower range. This resolution can be optionally improved to 100pA if required.

- + Available in 1 or 2 Independent Channel Versions
- + Full Remote Control via RS-232 or CAN Interface
- + Constant Precise Voltage, Low Ripple & Noise
- + Simultaneous Display of Voltage & Current
- + Switchable Output Polarity

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## FURTHER DETAILS

If the 'kill enable' function is selected the output is automatically shut down if the preset current is reached. Alternatively, if the 'kill' feature is left inactive and the HTP-SHQ reaches its current limit the output will continue to be provided.

The recessed 10 position limit switches are ideal for sensitive loads allowing the user to set additional protection against excess voltage and current.

External triggering of the inhibit function is also provided. Full remote control is offered via RS232 or CAN interface. The voltage ramp time is programmable over the interface.

Special versions are available on request for resistance/isolation measurements and Piezo testing.

### SELECTION TABLE

Part Number	Max. Power	Output Voltage Range	Output Current Range	Interface Type	Number of Channels
HTP-SHQ 122M	12W	0 - 2kV	0 - 6mA	RS-232	Single
HTP-SHQ 142M	12W	0 - 2kV	0 - 6mA	CAN	Single
HTP-SHQ 222M	12W	0 - 2kV	0 - 6mA	RS-232	Dual
HTP-SHQ 242M	12W	0 - 2kV	0 - 6mA	CAN	Dual
HTP-SHQ 124M	12W	0 - 4kV	0 - 3mA	RS-232	Single
HTP-SHQ 144M	12W	0 - 4kV	0 - 3mA	CAN	Single
HTP-SHQ 224M	12W	0 - 4kV	0 - 3mA	RS-232	Dual
HTP-SHQ 244M	12W	0 - 4kV	0 - 3mA	CAN	Dual
HTP-SHQ 126L	6W	0 - 6kV	0 - 1mA	RS-232	Single
HTP-SHQ 146L	6W	0 - 6kV	0 - 1mA	CAN	Single
HTP-SHQ 226L	6W	0 - 6kV	0 - 1mA	RS-232	Dual
HTP-SHQ 246L	6W	0 - 6kV	0 - 1mA	CAN	Dual

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	2mV <sub>P-P</sub> [ 5mV <sub>P-P</sub> for units with a 6kV output]
Resolution of Voltage Measurement	100mV (optional 10mV up to 4kV)
Current Measurement (Range 1)	I <sub>NOM</sub> mA, resolution = 100nA both display & interface
Current Measurement (Range 2)	100 µA, resolution = 1nA both display & interface
Current Measurement (Option Range 2)	10 µA resolution = 100pA, both display & interface
Display	6 digit LCD display/2 Ranges
Voltage Measurement Accuracy	± [0.05% VO + 0.02% V <sub>NOM</sub> ] for one year
Current Measurement Accuracy	± [0.05% IO + 0.02% of range] for one year
Stability (ΔV <sub>O</sub> /ΔV <sub>IN</sub> )	< 3 × 10 <sup>-5</sup> × V <sub>NOM</sub>
Stability Load to no Load (ΔV <sub>O</sub> )	< 5 × 10 <sup>-5</sup> × V <sub>NOM</sub>
Temperature Coefficient	< 3 × 10 <sup>-5</sup> /K
Operating Temperature	0 - 50°C
Voltage Setting	Switchable between front panel or interface [RS-232 or CAN]
Ramp Speed at [HV On/Off] [Manual]	Hardware ramp 500 V/s
Ramp Speed at [Interface]	Software ramp 2 - 255V/s
Protection	Separate current and voltage limit, EXINHIBIT, programmable current trip
Supply Voltage	100 - 240VAC
Output Polarity	Switchable
Dimensions	100 × 236 × 320mm [H × W × D]

## OPTIONS

CODE	DESCRIPTION
/ONI	Second current range 10µA with resolution of 100pA (Available in all models)
/VHR	Voltage measurement resolution: 10mV up to 4kV [setting ≤ 4kV = 30mV / > 4kV = 80mV]
/IWP	10 turn potentiometer for current limit setting

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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