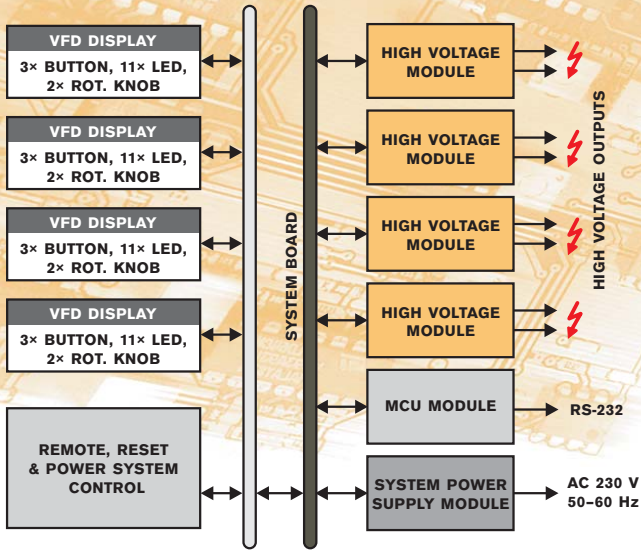




# Precision Four-Channel High Voltage Modular System Model HVS 04

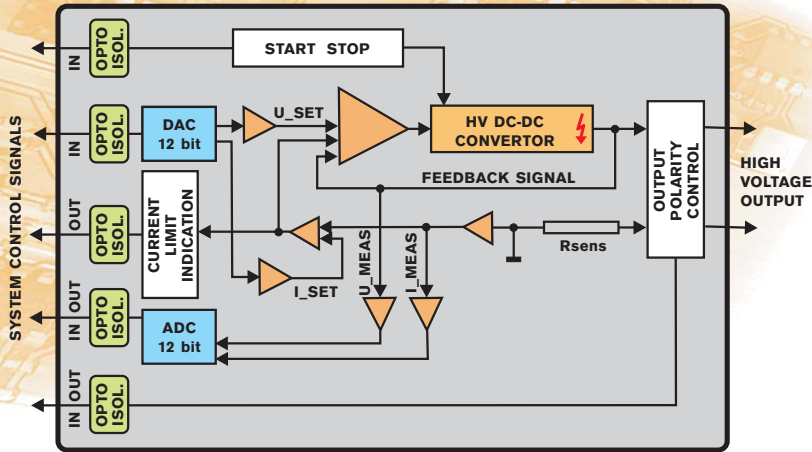


**HVS 04**



HVS 04 is a high precision 4-channel high voltage power supply with advanced and modern design. It consists of a system unit and up to four high voltage modules.

The system unit comprises the main power supply unit, the microprocessor unit controlling the device and input/output data communication and the system board with four free slots for inserting high voltage modules. There are also all indicators and control elements both for all channels and the entire device (4 VFD alphanumeric displays, 45 LED indicators, 1 filament lamp, 14 buttons, 1 latching switch, 8 rotation knobs). The housing of the system unit is made of a high-quality metallic case of the standard 19-inch dimension. It can be either fast mounted in 19" racks or operated in free table top position.



**HVS 04 - High Voltage Module**

## Parameters

### Ranges of HV modules

#### 1000 V module

output voltage	0 to 1000 V
output voltage resolution	0.25 V/bit
output current	0 to 10000 $\mu$ A
output current resolution	5 $\mu$ A/bit

#### 2000 V module

output voltage	0 to 2000 V
output voltage resolution	0.5 V/bit
output current	0 to 5000 $\mu$ A
output current resolution	2 $\mu$ A/bit

#### 3000 V module

output voltage	0 to 3000 V
output voltage resolution	1 V/bit
output current	0 to 3000 $\mu$ A
output current resolution	1 $\mu$ A/bit

#### 4000 V module

output voltage	0 to 4000 V
output voltage resolution	2 V/bit
output current	0 to 2000 $\mu$ A
output current resolution	0.5 $\mu$ A/bit

#### 5000 V module

output voltage	0 to 5000 V
output voltage resolution	2 V/bit
output current	0 to 1000 $\mu$ A
output current resolution	0.5 $\mu$ A/bit

### Accuracy

output HV	0.15 %
voltage measurement	0.1 %
current measurement	0.1 %
current output in current limitation	0.5 %

### Ripple 0.1 %

### Communication

RS-232 (TxD, RxD, GND)	
Baud rate	9600 Bd
Details	8 bit, 1 stop bit, no parity

### Power

230 VAC, 50/60 Hz	
Dimensions	19" x 3U x 250 mm (483 x 132 x 250 mm)
Weight	8 kg

The high voltage modules are supplied in the series of 1 to 5 kV with output current between 1 and 5 mA. Each HV module is automatically detected and fully identified by the system unit.

High voltage modules form voltage-stabilised HV output with preset current limitation and fully independent output voltage and current measurements. The HV output can be preset within the entire range (0 to  $U_{max}$ ) (!!). The current limitation is indicated both temporally and permanently until reset. The output polarity can be switched inside the HV modules. The output polarity is indicated (ask manufacturer for polarity, insulation and grounding details).