EHR

POLARITY SWITCHABLE HIGH END HIGH PRECISION HV MODULE

MMS HV
ULN
CFG
L

Out: **2 kV - 6 kV | 12 W per channel | 4 channels** | Ripple: **typ. < 2-3 mV_{P-P}**

- **4 channels**
- **Electronically switchable polarity for each channel independently**
- **2 kV / 6 kV versions**
- **6 kV channel with electronical switchable modes: up to 2 kV/4 mA, 4 kV/3 mA or 6 kV/2 mA**
- **High precision / very low ripple and noise**
- **Second current measurement range 20 µA for high precision version**
- **Voltage and current control per channel**
- **Hardware voltage and current limits**

The new EHR series represents a system capable multichannel high voltage module - equipped with the finest iseg HV generation technology in MMS system (Eurocard format). The module is made of high-precision components such as 24 bit ADC and up to 20 bit DAC and provides comprehensive safety features.

The EHR provides 4 HV-channels, each with an independent voltage and current control and reversible polarity.

A flexible 6kV channel provides a maximum versatility: With three electronically switchable HV-generation modes it can supply 4 mA up to voltages of 2 kV, 3 mA up to 4 kV or 2 mA up to 6 kV. Alternatively the EHR can be equipped with cost efficient 2kV/6mA fixed channels.

By offering different configurations and options this module perfectly covers various types of applications such as detector supply, experimental setup or lab use.

CONTROL & CONFIGURE BY iCS2

MMS

SYSTEMS

EHR

POLARITY SWITCHABLE HIGH END HIGH PRECISION HV MODULE

SPECIFICATIONS

	EHR STANDARD	EHR HIGH PRECISION
Polarity	electronically switchable	electronically switchable
Ripple and noise	< 10 mV	< 2 - 3 mV
Temperature coefficient	50 ppm / K	30 ppm/K | opt. 10 ppm/K (TC)
Resolution voltage setting	$2 \bullet 10^{-6} \bullet V_{nom}$	$2 \bullet 10^{-6} \bullet V_{nom}$
Resolution current setting	$2 \bullet 10^{-6} \bullet I_{nom}$	$2 \bullet 10^{-6} \bullet I_{nom}$
Resolution voltage measurement	$2 \bullet 10^{-6} \bullet V_{nom}$	$1 \bullet 10^{-6} \bullet V_{nom}$
Resolution current measurement - full range	$2 \bullet 10^{-6} \bullet I_{nom}$	$1 \bullet 10^{-6} \bullet I_{nom}$
Resolution current measurement - 2nd range	n/a	50 pA [I_{out} < 20µA]
Accuracy voltage measurement *	$\pm$ (0.01 % • V_{out} + 0.02 % • V_{nom})	$\pm$ (0.01 % • V_{out} + 0.01 % • V_{nom})
Accuracy current measurement *- full range	$\pm$ (0.01 % • I_{out} + 0.02 % • I_{nom})	$\pm$ (0.01 % • I_{out} + 0.01 % • I_{nom})
Accuracy current measurement *- 2nd range	n/a	$\pm$ (0.01 % • I_{out} + 4 nA)
Rate of voltage change	$1 \bullet 10^{-6} \bullet V_{nom}$/s up to 0.2 • V_{nom} / s	$1 \bullet 10^{-6} \bullet V_{nom}$/s up to 0.2 • V_{nom} / s
Protection	INHIBIT (option), Safety loop, short circuit, overload, hardware V/I limits	INHIBIT (option), Safety loop, short circuit, overload, hardware V/I limits
HV connector	SHV	SHV
Case	6U cassette, width 8 HP	6U cassette, width 8 HP

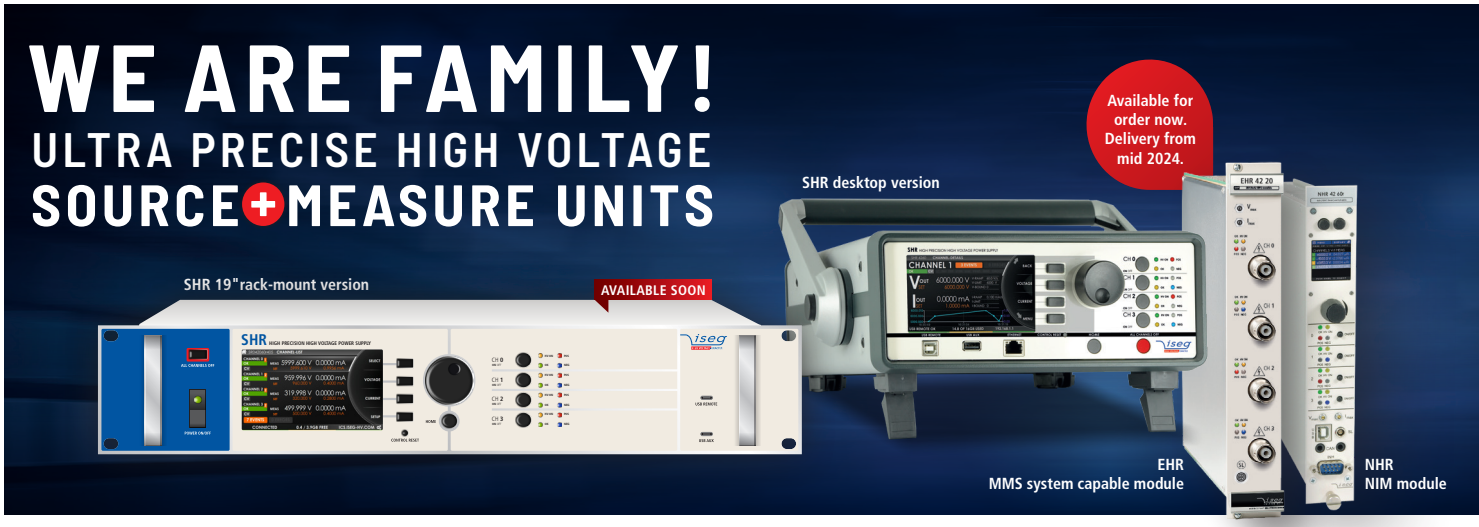
*) All specifications guaranteed from 1% · $V_{mode} < V_{out} < V_{mode}$

CONFIGURATIONS

MODEL	CHANNELS	PRECISION	OUTPUT VOLTAGE	OUTPUT CURRENT	HV-MODES (V_{mode} / I_{mode})
EHR 40 20	4	Standard	2 kV	6 mA	2 kV / 6 mA
EHR 40 60	4	Standard	6 kV	4 mA	6 kV / 2 mA | 4 kV / 3 mA | 2 kV / 4 mA
EHR 42 20	4	High	2 kV	6 mA	2 kV / 6 mA
EHR 42 60	4	High	6 kV	4 mA	6 kV / 2 mA | 4 kV / 3 mA | 2 kV / 4 mA

OPTIONS & ORDER INFO

OPTION	ORDER INFO
LOWER TEMP. COEFFICIENT (high precision version only)	TC
LOWER CURRENT (100 µA, high precision version only)	L
ACTIVE SAFETY LOOP INTERRUPTION	SLA
INTERNALLY POWERED SAFETY LOOP	SLP
INHIBIT PER CHANNEL	INH



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