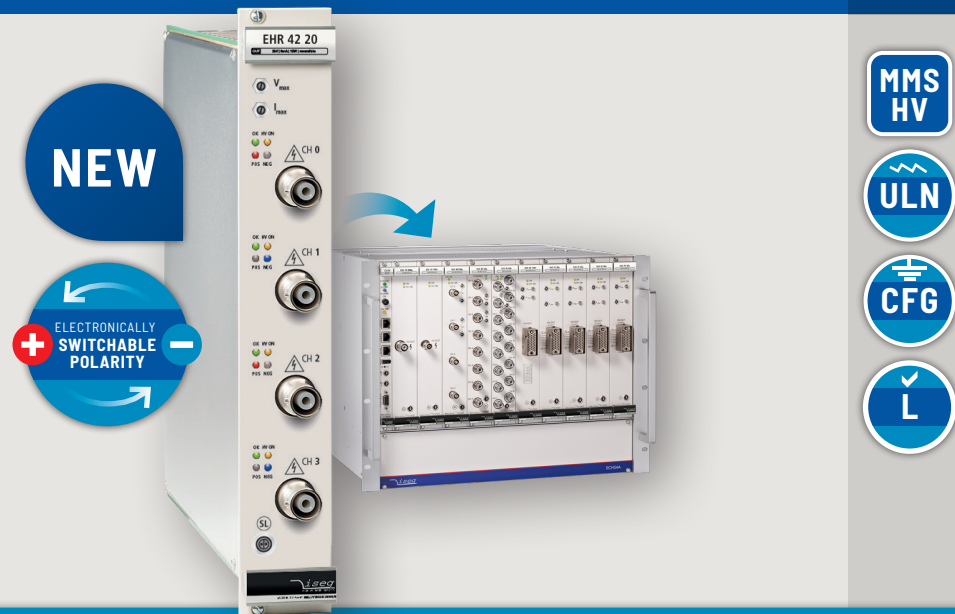


EHR

POLARITY SWITCHABLE HIGH END HIGH PRECISION HV MODULE



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 μ A 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.



MMS

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	$2 \cdot 10^{-6} \cdot V_{nom}$	$2 \cdot 10^{-6} \cdot V_{nom}$
Resolution current setting	$2 \cdot 10^{-6} \cdot I_{nom}$	$2 \cdot 10^{-6} \cdot I_{nom}$
Resolution voltage measurement	$2 \cdot 10^{-6} \cdot V_{nom}$	$1 \cdot 10^{-6} \cdot V_{nom}$
Resolution current measurement - full range	$2 \cdot 10^{-6} \cdot I_{nom}$	$1 \cdot 10^{-6} \cdot I_{nom}$
Resolution current measurement - 2nd range	n/a	50 pA [$I_{out} < 20\mu A$]
Accuracy voltage measurement *	$\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$	$\pm (0.01 \% \cdot V_{out} + 0.01 \% \cdot V_{nom})$
Accuracy current measurement * - full range	$\pm (0.01 \% \cdot I_{out} + 0.02 \% \cdot I_{nom})$	$\pm (0.01 \% \cdot I_{out} + 0.01 \% \cdot I_{nom})$
Accuracy current measurement * - 2nd range	n/a	$\pm (0.01 \% \cdot I_{out} + 4 nA)$
Rate of voltage change	$1 \cdot 10^{-6} \cdot V_{nom} / s$ up to $0.2 \cdot V_{nom} / s$	$1 \cdot 10^{-6} \cdot V_{nom} / s$ up to $0.2 \cdot V_{nom} / s$
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 $1\% \cdot V_{mode} < V_{out} < V_{mode}$

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

WE ARE FAMILY!

ULTRA PRECISE HIGH VOLTAGE SOURCE + MEASURE UNITS



SHR desktop version



Available for order now. Delivery from mid 2024.



EHR MMS system capable module