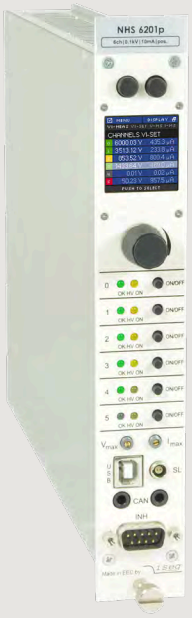
NHS

VERSATILE HIGH PRECISION HIGH VOLTAGE MODULE IN NIM STANDARD

- 6 channel, 100 V - 6 kV versions
- Very low ripple and noise
- Front panel control with 1,44" TFT display
- Hardware voltage and current limits
- Voltage and current control per channel
- USB, CAN interfaces
- Programmable parameters
- Option VCT: voltage correction by temperature



NIM

ULN

VCT

L

DIO

The iseg NHS modules are multi channel high voltage power supplies in 1/12 NIM standard cassette format. With up to 6 channels each single channel has an independent voltage and current control. By offering different configurations and options this module perfectly covers various types of applications such as detector supply, experimental setup or lab use. Several NHS modules can be daisychained by CAN and controlled with a single USB connection or by iseg iCS system. The module is made of best components such as 24 bit ADC and 20 bit DAC, an excellent front panel control with TFT display plus comprehensive security features.

SPECIFICATIONS

	NHS STANDARD	NHS HIGH PRECISION
Polarity	factory fixed, positive or negative	factory fixed, positive or negative
Ripple and noise	< 10 mV	< 5 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*	$\pm (0.01\ \% \bullet V_{out} + 0.02\ \% \bullet V_{nom})$	$\pm (0.01\ \% \bullet V_{out} + 0.01\ \% \bullet V_{nom})$
Accuracy current measurement* full range	$\pm (0.01\ \% \bullet I_{out} + 0.02\ \% \bullet I_{nom})$	$\pm (0.01\ \% \bullet I_{out} + 0.01\ \% \bullet I_{nom})$
Accuracy current measurement* 2nd range	n/a	$\pm (0.1\ \% \bullet I_{out} + 4\ nA)$
Voltage ramp up / down	up to 0.2 • V_{nom} / s opt. up to 0.75 • V_{nom} / s	up to 0.2 • V_{nom} / s opt. up to 0.75 • V_{nom} / s
Protection	INHIBIT, Safety loop, short circuit, overload, hardware V/I limits	
HV connector	SHV | BNC	SHV | BNC
Case	1/12 NIM cassette	1/12 NIM cassette

*) All specifications guaranteed from $1\% \cdot V_{nom} < V_{out} < V_{nom}$

OPTIONS & ORDER INFO

OPTION	ORDER INFO	EXAMPLE
POLARITY	pos.: **x = p**,neg.: **x = n**	NHS 60 10**p**
	mix: **x = x**	NHS 60 10**x**
STANDARD	**y=0**	NHS 6**0** 10p
HIGH PRECISION	**y=2**	NHS 6**2** 10p
LOWER TEMP. COEFFICIENT	**TC**	
LOWER OUTPUT CURRENT	**L** (100 µA, high precision version only)	
INHIBIT - DOWN / UP	**ID / IU**	
VOLT. CORRECTION BY TEMP.	**VCT**	

CONFIGURATIONS

MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	HV CONNECTOR
NHS 6y 01x	100 V	10 mA	BNC
NHS 6y 05x	500 V	15 mA | 10 mA [high pr.]	SHV | opt. BNC
NHS 6y 10x	1 kV	8 mA	SHV
NHS 6y 20x	2 kV	4 mA	SHV
NHS 6y 30x	3 kV	3 mA	SHV
NHS 6y 40x	4 kV	2 mA	SHV
NHS 6y 60x	6 kV	1 mA	SHV

Other configurations on request!