

# **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 control and current measurement per channel
- **▶ USB, CAN interfaces**
- programmable parameters (delayed trip etc.)
- option VCT: voltage correction by temperature

The iseg NHS modules of this series 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 / SPEZIFIKATION

	NHS STANDARD	NHS HIGH PRECISION			
Polarity	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 • 10 <sup>-6</sup> • V <sub>nom</sub>				
Resolution current setting	2 • 10 <sup>,6</sup> • I <sub>nom</sub>				
Resolution voltage measurement	2• 10 <sup>-6</sup> • V <sub>nom</sub>				
Resolution current measurement - full range	2 • 10 <sup>-6</sup> • I <sub>nom</sub>	1 • 10 <sup>-6</sup> • I <sub>nom</sub>			
Resolution current measurement - 2nd range	n/a	50 pA [I <sub>out</sub> < 20μA]			
Accuracy voltage measurement	± (0.01 % • V <sub>out</sub> + 0.01 % • V <sub>nom</sub> )				
Accuracy current measurement *- full range	± (0.01 % • I <sub>out</sub> + 0.02 % • I <sub>nom</sub> )				
Accuracy current measurement *- 2nd range	n/a	± (0.1 % ● I <sub>out</sub> + 4 nA)			
Rate of voltage change	up to 0.2 • V <sub>nom</sub> / s   opt. up to 0.75 • V <sub>nom</sub> / s				
HV connector	SHV   BNC				
Case	1/12 NIM cassette				
Protection	INHIBIT, Safety loop, short circuit, overload, hardware V/I limits				
$^{\circ}$ ) All specifications guaranteed from 1% $\cdot$ V $_{nom}$ < V $_{out}$ < V $_{nom}$					

#### ORDER & OPTIONS / BESTELLINFORMATIONEN

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

### **CONFIGURATIONS / KONFIGURATIONEN**

	Control of the contro				
	MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	HV CONNECTOR	
NEW	NHS 6y 01x	100 V	10 mA	BNC	
NEW	NHS 6y 05x	500 V	15 mA   10 mA [High Precision]	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! Andere Konfigurationen auf Anfrage.				



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**iseg** is a manufacturer of very precise and stable High Voltage Power Supplies with focus on physics and industrial applications. The product portfolio includes AC/ DC, DC/DC and modular High Voltage systems. The company was founded in 1995. Continuous growth and innovation strengthened the company's market position. **iseg** is well known for the delevopment of outstanding custom specific solutions for various special applications.

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