

EBS

BIPOLAR 4 QUADRANT HIGH VOLTAGE MODULE WITH CFG



SYSTEMS



- ▶ 4 / 12 / 24 channel, 500 V / 3 kV and custom versions
- ▶ 4-quadrant, usable as bipolar current sink and source
- ▶ perfect for electron optical systems and capacitive loads
- ▶ low ripple and noise
- ▶ hardware voltage and current limit
- ▶ voltage control and current measurement per channel
- ▶ programmable parameters

The bipolar EBS distribution modules are multichannel high voltage power supplies in MMS system (Eurocard format) with full 4-quadrant capabilities. The EBS can be used as bipolar current sink and source, which perfectly covers requirements of electron optical systems or capacitive loads. The EBS is built in common floating ground principle to reduce voltage noise level. With up to 24 channels each single channel has an independent voltage control up to 3 kV channel-voltage-difference. The EBS configuration of output voltage and current can be customized on request. The module is made of high precision components such as 24 bit ADC and 20 bit DAC and provides comprehensive security features. The EBS 3U is specifically developed for MMC crate ECH 12A. There it can be combined with MMC 3U modules for special purpose like ion beam applications.



© CERN

SPECIFICATIONS / SPEZIFIKATION

Polarity	bipolar 4 quadrant
Ripple and noise	< 10 mV
Temperature coefficient	30 ppm / K
Resolution voltage setting	$1 \cdot 10^{-5} \cdot V_{nom}$
Resolution voltage measurement	$2 \cdot 10^{-5} \cdot V_{nom}$
Resolution current measurement	$2 \cdot 10^{-4} \cdot I_{nom}$
Accuracy voltage measurement *	$\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$
Accuracy current measurement *	$\pm (0.1 \% \cdot I_{out} + 0.4 \% \cdot I_{nom})$
Rate of voltage change	up to $0.2 \cdot V_{nom} / s$ opt. up to $0.75 \cdot V_{nom} / s$
HV connector	R51 SHV
Case	3 / 6U cassette, width 8 HP
Protection	Safety loop

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

CONFIGURATIONS / KONFIGURATIONEN

MODEL	CHANNELS	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE AND NOISE	HEIGHT
EBS 4 005	4	± 500 V	± 1 mA	10 mV	3U
EBS C 005	12	± 500 V	± 1 mA	10 mV	6U
EBS 18 005	24	± 500 V	± 1 mA	10 mV	6U
EBS C 030	12	± 3 kV	± 500 µA	20 mV	6U
EBS 18 030	24	± 3 kV	± 500 µA	20 mV	6U

Other configurations on request! Andere Konfigurationen auf Anfrage.



iseq Spezialelektronik GmbH

Bautzner Landstr. 23
01454 Radeberg
Germany

phone: +49 351 26996-0
Fax: +49 351 26996-21
e-mail: info@iseq-hv.com

iseq 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. **iseq** is well known for the development of outstanding custom specific solutions for various special applications.