

EBS

BIPOLAR 4 QUADRANT HIGH VOLTAGE MODULE WITH CFG

- ▶ 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 (delayed trip etc.)



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.

SPECIFICATIONS

Polarity	bipolar 4 quadrant
Ripple and noise	< 20 mV
Temperature coefficient voltage measurement	< 20 ppm / K
Temperature coefficient current measurement	< 100 ppm / K
Resolution voltage setting	$2 \cdot 10^{-6} \cdot V_{nom}$
Resolution voltage measurement	$2 \cdot 10^{-6} \cdot V_{nom}$
Resolution current measurement	$1 \cdot 10^{-4} \cdot I_{nom}$
Accuracy voltage measurement *	$\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$
Accuracy current measurement *	$\pm (0.2 \% \cdot I_{out} + 0.2 \% \cdot I_{nom})$
Voltage ramp up / down	$1 \cdot 10^{-6} \cdot V_{nom}$ up to $1 \cdot V_{nom} / s$
Protection	Safety loop
HV connector	R51 SHV
Case	6U (8HP) cassette

*All specifications guaranteed from $-V_{nom} < V_{out} < V_{nom}$

ALSO AVAILABLE AS SYSTEM CAPABLE 3U MMC VERSION



CONFIGURATIONS

MODEL	CHANNELS	OUTPUT VOLTAGE	OUTPUT CURRENT	MAX V_{DIFF} CH-TO-CH	HEIGHT
EBS C0 05	12	± 500 V	± 1 mA	1 kV	6U
EBS 180 05	24	± 500 V	± 1 mA	1 kV	6U
EBS C0 12	12	± 1.2 kV	± 1 mA	1.2 kV	6U
EBS 180 12	24	± 1.2 kV	± 1 mA	1.2 kV	6U
EBS C0 30	12	± 3 kV	± 0.5 mA	3 kV	6U
EBS 1803 0	24	± 3 kV	± 0.5 mA	3 kV	6U

Other configurations on request!

OPTIONS & ORDER INFO

OPTION	ORDER INFO
ACTIVE SAFETY LOOP	SLA
INTERNALLY POWERED SAFETY LOOP	SLP