

# EDS

## DISTRIBUTOR HV MODULE WITH COMMON FLOATING GROUND

- ▶ 16 / 24 / 32 / 48 channel, 500 V / 3 kV versions
- ▶ Low Cost versions with reduced current measurement accuracy
- ▶ Very low ripple and noise
- ▶ Hardware voltage and current limit
- ▶ Voltage control and current measurement per channel
- ▶ Programmable parameters (delayed trip etc.)



The cost effective EDS distribution modules are multichannel high voltage power supplies in MMS system (Eurocard format). It is available as Standard version and as Low Cost version with reduced resolution and precision of current measurement. The EDS comes with common floating ground to reduce voltage noise level. With up to 48 channels each single channel has an independent voltage control. The module is made of high precision components such as 24 bit ADC and 20 bit DAC and provides comprehensive safety features.

### SPECIFICATIONS

	EDS STANDARD	EDS LOW COST
<b>Polarity</b>	factory fixed, positive or negative	factory fixed, positive or negative
<b>Ripple and noise</b>	< 5 mV	< 5 mV
<b>Temperature coefficient</b>	< 20 ppm / K	< 20 ppm / K
<b>Resolution voltage setting</b>	$2 \cdot 10^{-6} \cdot V_{nom}$	$2 \cdot 10^{-6} \cdot V_{nom}$
<b>Resolution voltage measurement</b>	$2 \cdot 10^{-6} \cdot V_{nom}$	$2 \cdot 10^{-6} \cdot V_{nom}$
<b>Resolution current measurement</b>	$1 \cdot 10^{-4} \cdot I_{nom}$	$5 \cdot 10^{-4} \cdot I_{nom}$
<b>Accuracy voltage measurement *</b>	$\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$	$\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$
<b>Accuracy current measurement *</b>	$\pm (0.1 \% \cdot I_{out} + 0.1 \% \cdot I_{nom})$	$\pm (1 \% \cdot I_{out} + 1 \% \cdot I_{nom})$
<b>Voltage ramp up / down</b>	up to $0.2 \cdot V_{nom} / s$ opt. up to $0.75 \cdot V_{nom} / s$	up to $0.2 \cdot V_{nom} / s$ opt. up to $0.75 \cdot V_{nom} / s$
<b>Protection</b>	Safety loop	Safety loop
<b>HV connector</b>	R51   SHV   I52	R51   SHV   I52
<b>Case</b>	6U cassette, width 8 HP	6U cassette, width 8 HP

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

### CONFIGURATIONS

MODEL	CHANNELS	OUTPUT VOLTAGE	OUTPUT CURRENT
EDS F1 10x	16	1 kV	1 mA
EDS 18y 10x	24	1 kV	1 mA
EDS 30y 10x	48	1 kV	1 mA
EDS F1 30x	16	3 kV	500 $\mu$ A
EDS 18y 30x	24	3 kV	500 $\mu$ A
EDS 30y 30x	48	3 kV	500 $\mu$ A

Other configurations on request!

### OPTIONS & ORDER INFO

OPTION	ORDER INFO	EXAMPLE
<b>POLARITY</b>	positive: <b>x = p</b> , negative: <b>x = n</b>	EDS F1 05p
<b>LOW COST</b>	standard: <b>y = 1</b> , low cost: <b>y = 3</b>	EDS F3 05p