

# EDS

## DISTRIBUTOR HV MODULE WITH COMMON FLOATING GROUND



SYSTEMS



- ▶ 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 security features.



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**SPECIFICATIONS / SPEZIFIKATION**

|                                       | EDS STANDARD  | EDS LOW COST                                    |
|---------------------------------------|---|---|
| <b>Polarity</b>                       | factory fixed, positive or negative                                 |   |
| <b>Ripple and noise</b>               | < 5 mV  |   |
| <b>Temperature coefficient</b>        | 30 ppm / K  |   |
| <b>Resolution voltage setting</b>     | $1 \cdot 10^{-5} \cdot V_{nom}$                                     |   |
| <b>Resolution voltage measurement</b> | $1 \cdot 10^{-5} \cdot V_{nom}$                                     |   |
| <b>Resolution current measurement</b> | $1 \cdot 10^{-4} \cdot I_{nom}$                                     | $5 \cdot 10^{-4} \cdot I_{nom}$                 |
| <b>Accuracy voltage measurement *</b> | $\pm (0.01 \% \cdot V_{out} + 0.02 \% \cdot V_{nom})$               |   |
| <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>Rate of voltage change</b>         | up to $0.2 \cdot V_{nom} / s$   opt. up to $0.75 \cdot V_{nom} / s$ |   |
| <b>HV connector</b>                   | R51   SHV   I52   |   |
| <b>Case</b>                           | 6U cassette, width 8 HP   |   |
| <b>Protection</b>                     | Safety loop   |   |

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

**CONFIGURATIONS / KONFIGURATIONEN**

| MODEL       | CHANNELS | OUTPUT VOLTAGE | OUTPUT CURRENT |
|-------------|----------|----------------|----------------|
| EDS Fy 05x  | 16       | 500 V          | 1 mA           |
| EDS 18y 05x | 24       | 500 V          | 1 mA           |
| EDS 20y 05x | 32       | 500 V          | 1 mA           |
| EDS 30y 05x | 48       | 500 V          | 1 mA           |
| EDS Fy 30x  | 16       | 3 kV           | 500 $\mu$ A    |
| EDS 18y 30x | 24       | 3 kV           | 500 $\mu$ A    |
| EDS 20y 30x | 32       | 3 kV           | 500 $\mu$ A    |
| EDS 30y 30x | 48       | 3 kV           | 500 $\mu$ A    |

Other configurations on request! Andere Konfigurationen auf Anfrage.

**ORDER & OPTIONS / BESTELLINFORMATIONEN**

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



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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 development of outstanding custom specific solutions for various special applications.