

EPS

VERSATILE BUILT-IN OR SYSTEM CAPABLE HV POWER-MODULE

Out: 500 V - 30 kV | 60 / 150 W | In: 24V DC | Ripple: opt.: $< 1 \cdot 10^{-4} \cdot V_{nom}$



- ✓ ARC
- ✓ CLD
- MMC
- THQ
- ↕ AIO
- CUSTOM

DC/DC

NEW

▶ ID chip in 3U version

- ▶ patented resonance converter technology
- ▶ high efficiency
- ▶ available as metal-box or 3U MMC version
- ▶ combinable in a multichannel THQ AC/DC HV power supply
- ▶ voltage and current control
- ▶ low ripple and noise, low EMI
- ▶ multiple options (INTERLOCK, ARC, CLD)
- ▶ highly customizable, optimized versions on request

EPS modules are versatile DC/DC high voltage power supplies with multiple options. The modules are available as compact metal box in 60W and 150W version or system capable in 3U Eurocassette-standard in 60W. EPS modules can be used as standalone DC/DC converters, combined to multichannel AC/DC supply in a THQ series or integrated in a modular MMC system. The output voltage is controllable via analog interface with either a potentiometer (internal reference voltage) or an analog control voltage. To protect the connected load the modules are equipped with INHIBIT and INTERLOCK (optional).

SPECIFICATIONS / SPEZIFIKATION

| | EPS 60 W | EPS 60 W - 3U | EPS 150 W |
|---|--|--|---------------|
| Polarity | | factory fixed, positive or negative | |
| Ripple and noise [f > 10 Hz] | | $< 5 \cdot 10^{-4} \cdot V_{nom}$ $< 2 \cdot 10^{-2} \cdot V_{nom}$ opt. up to 6 kV: $< 1 \cdot 10^{-4} \cdot V_{nom}$ | |
| Stability [$\Delta V_{out} / \Delta V_{in}$] | | $< 1 \cdot 10^{-4} \cdot V_{nom}$ | |
| Stability [$\Delta V_{out} / R_{load}$] | | $< 2 \cdot 10^{-4} \cdot V_{nom}$ | |
| Temperatur coefficient | | $< 2 \cdot 10^{-4} / K$ | |
| CLD - Repeat accuracy | | $< 1 \% \cdot V_{nom}$ | |
| Supply voltage | 22.8 - 25.2 V | | 21 - 29 V |
| Set / monitor voltage | | 0 - 5 V opt. 0 - 10 V | |
| Remote connector | D-Sub 9 | H15 | D-Sub 9 |
| Protection | overload and short circuit protected, INHIBIT, overvoltage/overtemp protection | | |
| Interlock | optional | | |
| Case | metal box | 3U cassette | metal box |
| Dimensions (L/W/H) | 185/108/57 mm | 60.96 mm / 12HP / 3U | 170/188/60 mm |
| HV connector | HV-cable | SHV GES | HV-cable |

CONFIGURATIONS / KONFIGURATIONEN

| EPS 60 W | V _{nom} | I _{nom} | RIPPLE AND NOISE | CONNECTOR-3U | EPS 150 W | V _{nom} | I _{nom} | RIPPLE AND NOISE | |
|---|------------------|------------------|-----------------------------------|--------------|---|------------------|------------------|-----------------------------------|--|
| EPx 05 127 24 y | 500 V | 120 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 10 157 24 y | 1 kV | 150 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 10 606 24 y | 1 kV | 60 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 20 756 24 y | 2 kV | 75 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 15 406 24 y | 1.5 kV | 40 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 40 406 24 y | 4 kV | 40 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 20 306 24 y | 2 kV | 30 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 80 206 24 y | 8 kV | 20 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 30 206 24 y | 3 kV | 20 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 120 126 24 y | 12 kV | 12.5 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 40 156 24 y | 4 kV | 15 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 150 106 24 y | 15 kV | 10 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 50 126 24 y | 5 kV | 12 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 200 755 24 y | 20 kV | 7.5 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 60 106 24 y | 6 kV | 10 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | SHV | EPx 300 505 24 y | 30 kV | 5 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | |
| EPx 80 705 24 y | 8 kV | 7 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | GES HB11 | | | | | |
| EPx 100 605 24 y | 10 kV | 6 mA | $< 5 \cdot 10^{-4} \cdot V_{nom}$ | GES HB11 | | | | | |
| EPx 150 405 24 y | 15 kV | 4 mA | $< 2 \cdot 10^{-2} \cdot V_{nom}$ | GES HB21 | | | | | |
| EPx 200 306 24 y | 20 kV | 3 mA | $< 2 \cdot 10^{-2} \cdot V_{nom}$ | GES HB21 | | | | | |
| EPx 300 205 24 y | 30 kV | 2 mA | $< 2 \cdot 10^{-2} \cdot V_{nom}$ | GES HB31 | | | | | |
| * optional: $< 1 \cdot 10^{-4} \cdot V_{nom}$ | | | | | * optional: $< 1 \cdot 10^{-4} \cdot V_{nom}$ | | | | |

ORDER & OPTIONS / BESTELLINFORMATIONEN

| OPTION | ORDER INFO | EXAMPLE |
|-------------------------------------|---|------------------|
| Polarity | positive: x = p, negative: x = n | EPp 05 127 24 5 |
| Set / monitor voltage | 0-5 V (standard): y = 05, 0-10 V (optional): y = 10 | EPp 05 127 24 10 |
| 3U - MMC capable version 3UC | | |
| ARC management | ARC | |
| Capacitor charger | CLD | |



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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.