

EPS

VERSATILE BUILT-IN OR SYSTEM CAPABLE HV POWER-MODULE

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



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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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.