

# CPS

BUILT-IN OR SYSTEM CAPABLE COMPACT HIGH VOLTAGE MODULE

Out: 500 V - 30 kV | 10 W | In: 24V DC | Ripple: typ.  $< 2 \cdot 10^{-5} \cdot V_{nom}$



**NEW**

▶ CPSmini PCB mountable version

- ▶ patented resonance converter technology
- ▶ available as metal-box or 3U MMC version
- ▶ combinable in a multichannel THQ AC/DC HV power supply
- ▶ INHIBIT
- ▶ hardware limits for current
- ▶ low ripple and noise, low EMI
- ▶ customized versions on request

CPS modules are highly stable analog controlled high voltage power supplies. They are available as compact metal box or system capable in 3U Eurocassette standard or PCB mountable as CPSmini version.

Modules of the CPS series can be used as standalone DC/DC converters, combined to multichannel AC/DC supply in a THQ or integrated in a modular MMC system.

The output voltage is controllable via analog interface with either a potentiometer (internal reference voltage) or an analogue control voltage. To protect the connected load the modules are equipped with INHIBIT, current and voltage limits.

DC/DC

MMC

THQ

AIO

CUSTOM



CPSmini: 8W in a PCB mountable metal box  
© iseg GmbH



CPS module in a customized THQ lab power supply  
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CPS 3U-eurocassette modules in a digitally controllable 19" crate  
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**SPECIFICATIONS / SPEZIFIKATION**

	CPS	CPS 3U	CPSmini
Ripple and noise [f > 10 Hz]	typ. < 2 • 10 <sup>-5</sup> • V <sub>nom</sub>		< 5 • 10 <sup>-6</sup> • V <sub>nom</sub>
Stability - [ΔV <sub>out</sub> / ΔV <sub>in</sub> ]	< 1 • 10 <sup>-4</sup> • V <sub>nom</sub>		
Stability - [ΔV <sub>out</sub> / ΔR <sub>load</sub> ]	< 2 • 10 <sup>-4</sup> • V <sub>nom</sub>		
Temperature coefficient	100 ppm / K		50 ppm/K
Supply voltage	22.8 - 25.2 V		
Set / monitor voltage	0 - 5 V   opt. 0 - 10 V		0 - 5 V
Remote connector	D-Sub 9	H15	pin
Polarity	factory fixed, positive or negative		
Protection	overload and short circuit protected, INHIBIT, I-limit		
HV connector	HV-cable	SHV   GES	pin
Case	metal box (THQ) 3U cassette (MMC capable)		metal box moulded (PCB)

**CONFIGURATIONS / KONFIGURATIONEN**

MODEL	V <sub>nom</sub>	I <sub>nom</sub>	L/W/H - BOX	HP/DEPTH - 3U	CONNECTOR - 3U
CPx 05 206 24 y	500 V	20 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 10 106 24 y	1 kV	10 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 15 805 24 y	1.5 kV	8 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 20 605 24 y	2 kV	6 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 30 405 24 y	3 kV	4 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 40 305 24 y	4 kV	3 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 50 205 24 y	5 kV	2 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 70 155 24 y	7 kV	1.5 mA	155/75/40 mm	8 HP / 40.64 mm	SHV
CPx 100 105 24 y	10 kV	1 mA	185/75/40 mm	12 HP / 61.0 mm	GES HB11
CPx 150 604 24 y	15 kV	0.6 mA	185/75/40 mm	12 HP / 61.0 mm	GES HB21
CPx 200 504 24 y	20 kV	0.5 mA	185/95/40 mm	12 HP / 61.0 mm	GES HB21
CPx 300 304 24 y	30 kV	0.3 mA	185/95/40 mm	12 HP / 61.0 mm	GES HB31
<b>CPSmini</b>					
CPx 10 805 24 y M	1 kV	8 mA	120/40/25 mm	-	-
CPx 20 405 24 y M	2 kV	4 mA	120/40/25 mm	-	-
CPx 30 255 24 y M	3 kV	2.5 mA	120/40/25 mm	-	-
CPx 40 205 24 y M	4 kV	2 mA	120/40/25 mm	-	-
CPx 60 135 24 y M	6 kV	1.3 mA	120/40/25 mm	-	-

**ORDER & OPTIONS / BESTELLINFORMATIONEN**

OPTION	ORDER INFO	EXAMPLE
Polarity	positive: <b>x = p</b> , negative: <b>x = n</b>	CPp 05 206 24 5
Set / monitor voltage	0-5 V (standard): <b>y = 05</b> , 0-10 V (optional): <b>y = 10</b>	CPp 05 206 24 10
3U - MMC capable version	<b>3UC</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.

