

technical datasheet

CPS-1 AC

AC Power supply with IS DC outputs for Challenger terminals

- Hazardous area operation Zone 1 & 2
- 8 x 12V, 520mA IS outputs
- Highest dependability
- 90 to 253V AC input
- IEC and ATEX certification
- Cost and weight improved design



The CPS-1 AC is a hazardous-area power supply unit designed to power the GECMA Challenger display terminal models 15i, 18i and 22i.

Constructed as intrinsically safe mounting module the CPS-1 AC power supply can be integrated easily into our standard enclosure, a huge range of special enclosures, as well as existing enclosures, walls and cabinets.

The unit is both IEC and ATEX certified, enabling it to be installed and operated in hazardous areas up to Zone 1. The CPS-1 AC is powered from a safe (non-hazardous) area and can accept AC supplies with the universal wide voltage range of 90 to 253V.

The deliberate selection of high-quality materials allows the CPS-1 AC to be used under temperature conditions of -10°C to +50°C with no functional impairment. **The rugged design ensures highest dependability** and is ideallly suited to surviving the harsh environments typically found in Pharmaceutical, Chemical, Petro Chemical, Oil & Gas and Off-shore manufacturing.

The CPS-1 AC power supply is durable by stainless steel housing, lowest power dissipation and use of exlusively passive mechanical components like passive cooling.

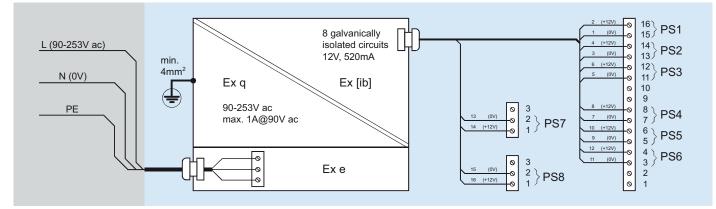
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www.gecma.com

info@gecma.com

BLOCK SCHEMATIC DIAGRAM



SPECIFICATION

ELECTRICAL

Supply voltage:	90 - 253V AC,
Supply current:	1.0A (max.) @ 90V
Outputs	8 x 12V @ 520mA (nominal)
Power consumption:	60W approx. (fully loaded max. 80W)

SAFETY DESCRIPTION (each individual output)

Voltage :	U _o = 12.3V dc
Current :	l _o = 543mA
Power :	$P_{o} = 6.68W$
	(Rectangular output characteristic)
	max. external capacitance : $C_0 \le 1\mu F$ max. external inductance : $L_0 \le 10\mu H$ The supply outputs are galvanically isolated from each other up to 60V and also galvanically isolated from the input.

ENVIRONMENTAL

Temperature	Operating: -10°C - +50°C Storage: -20°C - + 70°C
Mounting	Needs to be mounted into a GECMA Challenger housing or any housing with at least IP54.

MECHANICAL

Enclosure material	Stainless steel and aluminium
Dimensions	390 (L) x 364 (W) x 80 (D) mm
Weight	18kg (approx.)

CERTIFICATION

Authority	ATEX, IEC
Standards	EN 60079-0: 2009 EN 60079-5: 2007 EN 60079-7: 2007 EN 60079-11:2007
Approved for	🐼 II2G Ex e q [ib] IIC T4 Gb
Certificate No.	TÜV 11 ATEX 7018 X IECEx TUR 12.0003X

ORDERING INFORMATION

The available unit is designed to power the GECMA Challenger display terminal models 15i, 18i and 22i.

Part No.: GEC-CPS-1AC

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

INTERNATIONAL: +49 (0) 2237 / 6996-0 info@gecma.com

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Gecma Components electronic GmbH Heisenbergstrasse 26-40, D-50169 Kerpen, Germany