

CPS-1 DC

DC Power supply with IS DC outputs for Challenger terminals

- Hazardous area operation Zone 1 & 2
- 8 x 12V, 520mA IS outputs
- Highest dependability
- 20 to 30V DC input
- IEC and ATEX certification
- Cost and weight improved design



The CPS-1 DC 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 DC 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.

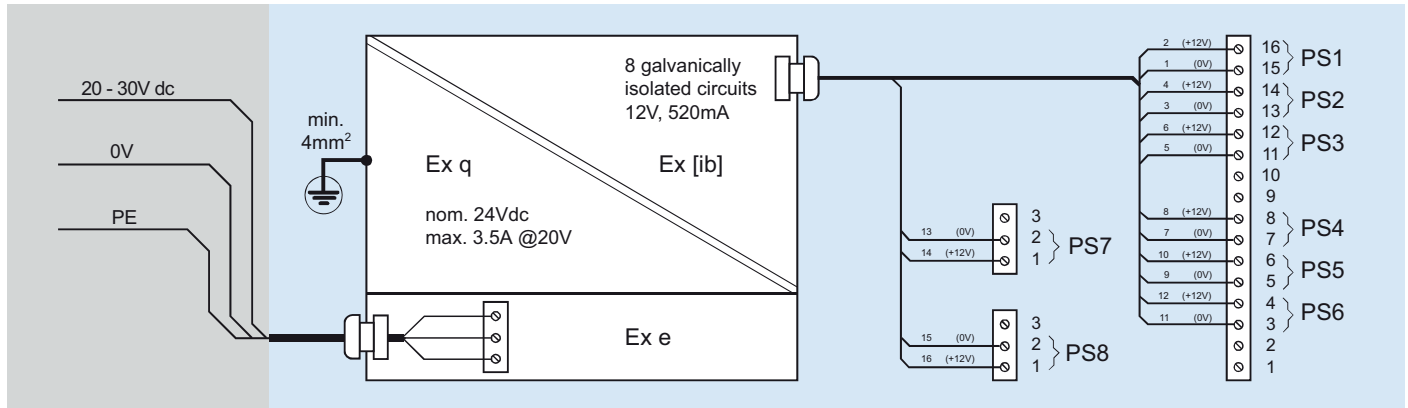
The CPS-1 DC is powered from a safe (non-hazardous) area and can accept DC supply outputs, each one providing a nominal input of 24V but can accept DC input supplies in the voltage range of 20 to 30V.

The deliberate selection of high-quality materials allows the CPS-1 DC to be used under temperature conditions of -10°C to +50°C with no functional impairment.

The rugged design ensures highest dependability and is ideally suited to surviving the harsh environments typically found in Pharmaceutical, Chemical, Petro Chemical, Oil & Gas and Off-shore manufacturing.

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

BLOCK SCHEMATIC DIAGRAM



SPECIFICATION

ELECTRICAL

Supply voltage:	20 - 30V DC, (nom. 24V)
Supply current:	3.5A (max.) @ 20V
Outputs	8 x 12V @ 520mA (nominal)
Power consumption:	60W approx. (fully loaded max. 70W)

ORDERING INFORMATION

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

Part No.: **GEC-CPS-1DC**

SAFETY DESCRIPTION (each individual output)

Voltage :	$U_o = 12.3V$ dc
Current :	$I_o = 543mA$
Power :	$P_o = 6.68W$ (Rectangular output characteristic) max. external capacitance : $C_o \leq 1\mu F$ max. external inductance : $L_o \leq 10\mu H$ The supply outputs are galvanically isolated from each other up to 60V and also galvanically isolated from the input.

ENVIRONMENTAL

Temperature	Operating: $-10^{\circ}C - +50^{\circ}C$ Storage: $-20^{\circ}C - +70^{\circ}C$
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	10kg (approx.)

CERTIFICATION

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

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.