

Power supplies HPSG2 series

Buffer switched mode power supply Grade 2

CODE: **HPSG2** v.1.0/III
NAME: **Buffer switched mode power supply Grade 2**

EN



Features:

- compliance with norm EN50131-6:2017 in grade 1, 2 and II environment class
- compliance with norm (KD) EN60839-11-2:2015+AC:2015 standard and I environment class
- supply voltage ~200 - 240 V
- uninterrupted voltage of DC 13,8 V or 27,6 V
- available versions with current efficiencies
13,8 V: 2 A / 3 A / 5 A / 10 A / 20 A
27,6 V: 2 A / 3 A / 5 A / 10 A
- high efficiency (up to 89%)
- battery charging current jumper selectable
- START function of manual switch to battery power
- LED optical indication
- deep discharge battery protection (UVP)
- dynamic battery test
- battery circuit continuity control
- battery voltage control
- battery charging and maintenance control
- battery output protection against short circuit and reverse connection
- protections:
 - SCP short circuit protection
 - OLP overload protection
 - OVP overvoltage protection
 - surge protection
 - antisabotage protection: unwanted enclosure opening
- warranty – 2 years from production date

DESCRIPTION

The buffer power supply is designed in accordance with the requirements of the (I&HAS) EN50131-6:2017 grade 1,2, II environmental class and EN60839-11-2:2015+AC:2015, I environmental class. Power supplies units are intended for for an uninterrupted supply of I&HAS and KD devices requiring stabilized voltage of 12 or 24 V DC ($\pm 15\%$).

DISPLAYING PARAMETERS OF THE POWER SUPPLY:

PSU's name	Output voltage	Charging current	Output current	Total output current with charging
			In standby mode for grade 1, 2 EN50131-6	
HPSG2-12V2A-B	13,8 V	0,5 / 1 A	0,58 A	2,5 A
HPSG2-12V3A-C		0,5 / 1 A	1,41 A	3,5 A
HPSG2-12V5A-C		1 / 2 A	1,41 A	5 A
HPSG2-12V7A-C		1 / 2 A	1,41 A	7 A
HPSG2-12V7A-D		1 / 2 A	3,33 A	7 A
HPSG2-12V10A-D		1 / 4 A	3,33 A	10 A
HPSG2-12V20A-E		2 / 4 / 8 A	5,41 A	20 A
HPSG2-24V2A-B	27,6 V	0,5 / 1 A	0,58 A	2,5 A
HPSG2-24V3A-B		0,5 / 1 A	0,58 A	3,5 A
HPSG2-24V3A-C		0,5 / 1 A	1,41 A	3,5 A
HPSG2-24V5A-C		1 / 2 A	1,41 A	5 A
HPSG2-24V5A-D		1 / 2 A	3,33 A	5 A
HPSG2-24V10A-C		1 / 2 / 4 A	1,41 A	10 A
HPSG2-24V10A-D		1 / 2 / 4 A	3,33 A	10 A



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TECHNICAL DATA	HPSG2-12V	HPSG2-24V
PSU type EN50131-6	A, Grade 1,2, II environmental class	
Power supply	~ 200 - 240 V	
Output voltage	11 - 13,8 V – buffer operation 10 - 13,8 V – battery-assisted operation	22 - 27,6 V – buffer operation 20 - 27,6 V – battery-assisted operation
Current consumption by PSU during battery-assisted operation	30 - 50mA	20 - 40mA
Overload protection OLP	105÷150% of power supply, automatic recovery	
Over voltage protection OVP	>19 V (activation requires disconnecting the load or supply for about approx. 1 min.)	>37 V (activation requires disconnecting the load or supply for about approx. 1 min.)
Deep discharge battery protection UVP	U<9,5 V (± 5%) – disconnection of battery terminal	U<19 V (± 5%) – disconnection of battery termina
Battery circuit protection SCP and reverse polarity connection	- F _{BAT} fuse (in case of a failure, fuse-element replacement required)	
Technical outputs: EPS; output indicating AC power failure APS; output indicating battery failure	- relay type: 1 A@ 30 V DC / 50 V AC	
Tamper protection: TAMPER indicates enclosure opening	- microswitch, NC contacts (enclosure closed), 0,5 A@50 V DC (max.)	
Optical indication	- LED on PCB of power supply unit - LED indicators on power supply's cover	
Operating conditions	Temperature: -10°C ÷ +40°C relative humidity 20%...90%, without condensation	
Protection class EN 62368-1	I (first)	
Protection grade EN 60529	IP20	
Environment class EN 50131-6	II	
Environment class EN 60839-11-2	I (first)	
Vibrations and impulse waves during transport	According to PN-83/T-42106	
Enclosure	Steel sheet DC01 0,7–1,0mm, color RAL 9003	
Closing	Cheese head screw (at the front), (lock assembly possible)	
Declarations, warranty	CE, 2 years from production date	
Notes	Enclosure does not adjoin assembly surface so that cables can be led. Convictional cooling / forced cooling	

