

CODE: **HPSG2** v.1.0/II  
 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 EN60839-11:2013 in grade 1, 2 and II 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 the production date

### Description

The buffer power supply is designed in accordance with the requirements of the (I&HAS) EN50131-6:2017 and (KD) EN60839-11:2013 standard, grade 1, 2 and II environmental class. The 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	Output current max.	Output current (in standby mode for grade 2 EN50131-6, EN60839-11)	Charging current
HPSG2-12V2A-B	13,8 V	2,5 A	0,58 A	0,5 / 1 A
HPSG2-12V3A-C	13,8 V	3,5 A	1,41 A	0,5 / 1 A
HPSG2-12V5A-C	13,8 V	5 A	1,41 A	1 / 2 A
HPSG2-12V7A-C	13,8 V	7 A	1,41 A	1 / 2 A
HPSG2-12V7A-D	13,8 V	7 A	3,33 A	1 / 2 A
HPSG2-12V10A-D	13,8 V	10 A	3,33 A	1 / 4 A
HPSG2-12V20A-E	13,8 V	20 A	5,41 A	2 / 4 / 8 A
HPSG2-24V2A-B	27,6 V	2,5 A	0,58 A	0,5 / 1 A
HPSG2-24V3A-B	27,6 V	3,5 A	0,58 A	0,5 / 1 A
HPSG2-24V3A-C	27,6 V	3,5 A	1,41 A	0,5 / 1 A
HPSG2-24V5A-C	27,6 V	5 A	1,41 A	1 / 2 A
HPSG2-24V5A-D	27,6 V	5 A	3,33 A	1 / 2 A
HPSG2-24V10A-C	27,6 V	10 A	1,41 A	1 / 2 / 4 A
HPSG2-24V10A-D	27,6 V	10 A	3,33 A	1 / 2 / 4 A

Total current of the receivers + battery charging current mustn't cross maximum current of power supply.

TECHNICAL DATA	HPSG2-12V	HPSG2-24V
PSU type	A (EPS - External Power Source), Environmental Class II	
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	$U < 9,5 \text{ V} (\pm 5\%)$ – disconnection of battery terminal	$U < 19 \text{ V} (\pm 5\%)$ – disconnection of battery terminal
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	II environmental class, temperature: $-10^{\circ}\text{C} \div +40^{\circ}\text{C}$ relative humidity 20%...90%, without condensation	
Protection class EN 62368-1	I (first)	
Protection grade EN 60529	IP20	
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. Convexional cooling / forced cooling	