

CODE: **HPSG2** v.1.0/I
 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-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 V (± 5%) – disconnection of battery terminal | U<19 V (± 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 klasa środowiskowa (PN-EN12101-10:2007), -5°C ÷ 40°C | |
| Protection class EN 62368-1 | I (first) | |
| Protection grade EN 60529 | IP20 | |
| Operating temperature | -10°C...+40°C | |
| Storage temperature | -20°C...+60°C | |
| Vibrations and impulse waves during transport | Wg 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 | |