



UNINTERRUPTABLE POWER SUPPLY SYSTEM

S3000

Uninterruptable power supply system *S3000* is designed to provide high quality power to telephone exchanges and other telecom devices, where low disturbances, low noise and short response time are mandatory. *S3000* system is designed for 24 hours autonomous operation, enabling the application in remote locations without crew. May operate with or without batteries, with or without diesel generator or other auxiliary power source.

Uninterruptable power supply system *S3000* is manufactured for 48V, 60V, 24V and 110V output voltage versions. Covers 1 kW to 150 kW output power range.

Upon customer request other output voltages are available.

S3000 is easy to expand or modify "on line", no need to interrupt system operation or in any way endanger the basic functions of the system.

Features

- Sixth generation power supply system since 1988
- Large capacity: upto 3000 A / 170 kW
- 4 output voltage options: 48 V, 60 V, 24 V, 110 V
- Modular, upto 120 rectifier units 1400 W each
- Redundancy $N+1$, $N+2$ or $N+P$
- Built-in battery overdischarge protection
- Fulfils relevant international standards and recommendations: *ITU-T, ETSI, ISO, IEC...*
- Power factor corrected $> 0,98$
- 2 battery ports
- Low psophometric noise < 1 mV
- Temperature compensated output voltage
- High efficiency
- High reliability
- Does not require preventive maintenance

Applications

- Uninterruptable power supply of telecom equipment
- Accu-batteries maintenance
- Uninterruptable power supply of computer and other professional electronic equipment
- Replacement of old uninterruptable power supply systems

Benefits

- Same rectifier units for small and large capacity - simplified maintenance
- Extremely robust, resistant to harsh working conditions
- 2 large LED displays + alphanumeric LCD
- Fully "plug-in" rectifier units replacement
- Extended input voltage range available on request
- Natural convection cooled
- User friendly, built in 16-keys keyboard
- Mains voltage measurement option available
- LED display on each rectifier unit
- Integrates with SRCE TC-011 telephone exchange

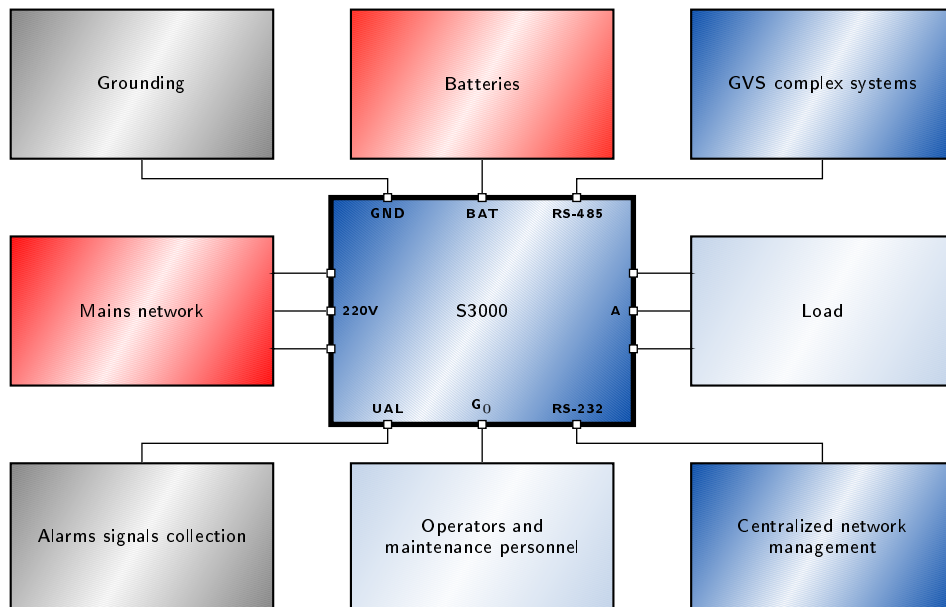
Exceptional resistance to mains voltage disturbances and high reliability make *S3000* system an ideal solution for operation in harsh conditions, like rural areas. If You have a site where other power supply systems fail, *S3000* is the right system for You.



Power supply system S3000 is modern, highly professional system, featuring exceptional electrical characteristics, simple handling and high reliability. Thanks to many adjustable and programmable features, easily copes with customer special requests.

Power supply system S3000 is designed for international market and is available in english, russian and serbian language versions.

Together with other GVS products, like switching systems, test & measurement equipment and other, S3000 system offers complete, well composed solution and forms one-stop-shop for all telecom equipment for your telecom network node.



Technical data

Input data

Mains voltage V_i 220/230 V_{ac}
 Mains frequency 47-63 Hz
 Mains voltage range -15% .. +10%
 Mains distortion 30%
 Input current 7 A @ V_{nom}
 Power factor (cos φ) > 0,98
 Input fuse per unit 10A fast

Output voltage

Floating voltage 2,1-2,3V/cell
 Charging voltage 2,2-2,4V/cell
 Voltage regulation better than 1%
 Voltage spikes < 2 V_{p-p}
 Psophometric noise < 1 mV_{ac}
 Noise 10Hz-450kHz < 25 mV
 Wideband noise < 10 mV_{ac}/MHz

Output current

| Var. | 48V | 60V | 24V | 110V | UM |
|------|------|------|------|------|----|
| S1 | 100 | 80 | 200 | 44 | A- |
| S2 | 200 | 160 | 400 | 88 | A- |
| S3 | 400 | 320 | 800 | 176 | A- |
| nS3 | 3000 | 2400 | 3000 | 1320 | A- |

Response time 1 msec
 Current limit 105%

System configurations

| Configuration | S1 | S2 | S3 | nS3 | UM |
|--------------------------------------|------------|------------|-------------|------------|-----------------|
| Rectifier units | 4 | 8 | 16 | 120 | pcs |
| Output power | 5,5 | 11 | 22 | 170 | kW |
| Dimensions w x d x h | 64x50x45 | 66x62x136 | 66x62x209 | 530x62x209 | cm |
| "Empty" / "full" system total weight | 40/80 | 115/195 | 195/355 | 1540/2740 | kg |
| Battery fuses high efficiency | 2 upto 125 | 2 upto 250 | 2 upto 400 | n upto 630 | A _{dc} |
| Load fuses | 2x125,6x10 | 8x125 | 4x250,4x125 | n upto 630 | A _{dc} |

Batteries

| Feature | 48V | 60V | 24V | 110V |
|-------------------------|------------|----------|------------|--------------|
| Total cells per battery | 23 / 24 | 28/29/30 | 11 / 12 | 53/54/55 |
| Floating voltage | 48,3..55,2 | 58,8..69 | 23,1..27,6 | 111,3..126,5 |
| Charging voltage | 50,6..57,6 | 61,6..72 | 24,2..28,8 | 116,6..132 |
| Overdischarge treshold | 39,1..45,6 | 47,6..57 | 18,7..22,8 | 90,1..104,5 |

General data

Operation & maintenance RS232, RS485
 Temperature range 0°C .. 40°C
 Storage temperature -10°C .. 70°C
 Relative humidity 0 .. 90%
 Measure/display accuracy ±1%, ±0,5%
 Service life 40 years
 Spare parts 10 years



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GVS ko - research, development, manufacturing & engineering company in electronics
 Product line
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 Uninterruptable power supply systems
 Special purpose test & measurement equipment
 Special purpose communications equipment

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