STATRON
NON STOP POWER

Power Generation

Transmission & Distribution

Oil & Gas

Industry

Infrastructure

INDUSTRIAL UPS SYSTEM

S2000e Series 5–200 kVA

Key features

- Based on well proven technology platform
- Design life of 25–30 years
- Latest digital control technology
- Clear structured front panel
- State of the art communication software
- Fully monitored system platform
- Rugged and heavy industrial design
- Intelligent battery management

Operational benefits

- High reliability
- Long durability
- High degree of customization and flexibility
- Easy operation and control
- Easy access and intuitive communication
- Low operational costs
- Low maintenance costs
- Extremely high degree of availability

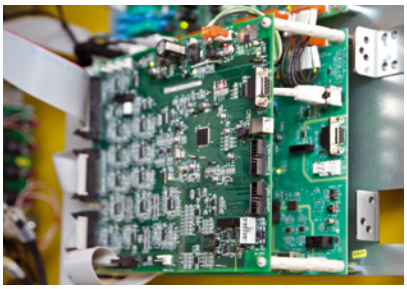
S2000e – The standard in reliability, functionality and serviceability

The Statron industrial UPS is a heavy-duty, single or three-phase output system, specifically designed for the harshest operating environments in industrial applications, such as oil and gas, petrochemical, power generation, or distribution and transmission plants. The modular and flexible system concept, along with a wide range of options, enables a fully customized solution that can meet any requirement, regardless of location or specificity. The UPS incorporates the latest µP digital technology, ensuring user-friendly operation and comprehensive monitoring. Its true online double conversion technology provides high power quality and reliability.

Reliability through excellent design

The outstanding reliability of the S2000e is ensured by a combination of high-end technology and robust design. In detail, the advantages are based on:

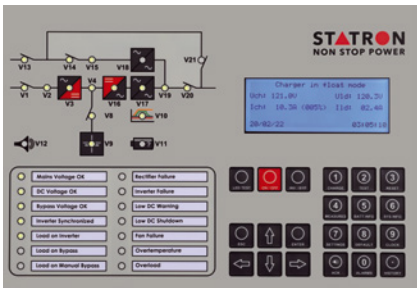
- Leading microprocessor-controlled SCR and IGBT technology
- Integrated static and manual bypass switches
- Isolation transformer for rectifier input inverter output and bypass (option)
- Internal multi-channel power supply
- Fully monitored fans
- LCD display, LED mimic panel, and keyboard for user interaction
- Real-time temperature display and monitoring
- Control scheme for best diesel genera-tor compliance
- Automatic and manual battery testing
- RS485 internal communication bus
- CAN bus for parallel operation for robust digital communication
- DedicatedI/O board with numerous configurable digital inputs and outputs
- Comprehensive digital communication via RS232/RS485/Ethernet interfaces
- 12-pulse rectifier with active load shar-ing (option)
- Oversized rectifier for long battery backup (option)
- Parallel redundant and power increase configurations(option)
- External manual bypass switch (option)
- Special color and higher protection de-gree (option)



Durability due to use of proven technology

UPS solutions engineered by Statron have been protecting industrial installations for more than four decades. The outstanding durability of the S2000e is based on:

- Well proven system platform S2000e
- Use of high-quality rugged industrial components
- Design life of 25–30 years
- Compliance to all relevant ISO and IEC/EN standards
- Electrical and physical integrated galvanic isolation
- Designed to withstand harsh environmental conditions (up to IP54)



Easy Operation & Control

The front panel of the S2000e facilitates acomprehensive and flexible human machine interface (HMI). An easy and intuitive operation and control of the system is achieved through:

- Colour-coded and animated LED mimic flow diagram adapted to actual configuration
- Comprehensive 8-line LCD display
- Multi-language support
- 14 programmable alarms / indications
- Real time event recorder for 2500 events
- Continuous battery health check
- Multi-level user management
- Front access to key components to allow fast and cost-effective maintenance

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Easy accessible interface & intuitive communication

State of the art communication software and gateway supports the monitoring and control of the S2000e. Intuitive communication is achieved through:

- RS232/RS485 serial interface with MODBUS protocol
- Modbus TCP/IP interface
- PROFIBUS and IEC 61850 interface
- TCP/IP network interface with on-board web-server
- USB-stick interface for event log
- Remote display
- Programmable relays cards
- Digital inputs for EPO, generator operation etc.

Reliable battery use and management

Battery monitoring and management is a key factor for a reliable and durable power back-up. The Statron S2000e has class leading built-in features, such as:

- Multi-string battery current monitoring
- Battery availability check
- Smart Battery Monitor (constantly updated battery capacity and battery back-up time)
- Automated / manual partial discharge testing
- Compatible with all battery types / wide DC range
- Four individual programmable battery charge voltages
- Two individual battery charge current limitation levels
- Float and Boost Current monitoring

Technical specifications | S2000e Series 5–200 kVA

Output rating (kVA)		5	10	15	20	30	40	50	60	80	100	120	160	200
Rectifier input														
Rectifier AC input voltage		3x208/380/400/415/480/500/690 V ±10% (others on request)												
Rectifier input frequency		50 Hz / 60 Hz ± 5%												
Rectifier input power factor		Typical > 0.8 ind.												
Rectifier output / Battery														
Nominal voltage		110 / 125 / 220 / 400 VDC												
Setting range:	Float voltage	100 – 120%												
	Boost voltage	100 – 130%												
	Initial charge voltage	100 – 150%												
DC voltage tolerance	Static	± 1%												
	Dynamic	max. ± 10% Vrms / ± 2% Vrms within 100 ms												
DC ripple voltage		< 2% rms without battery connected (lower on request)												
Charging characteristics		IU / IUoU acc.DIN 41773												
Inverter output														
Inverter AC output voltage		1x120/220/230/240 V (others on request) 3x208/380/400/415 V (others on request)												
Inverter AC output frequency		50 Hz / 60 Hz ± 0.1%												
Inverter AC output voltage regulation		± 1% under all static load conditions												
Inverter AC output voltage THDu		<2% for linear load / <5% for non-linear load												
Inverter overload capability		125% 10 min / 150% 1 min / 200% 200 ms / 200% short circuit 5 s												
Bypass input														
Bypass AC input voltage		1x120/220/230/240/277/288/400 V ±10% (others on request) 3x208/380/400/415/480/500/690 V ±10% (others on request												
Bypass AC input frequency		50 Hz / 60 Hz ± 0.1%												
Bypass overload capability		150% 1 min / 1000% 50 ms												
General data														
Efficiency		82% - 94% depending in model and load												
Noise Level		55 dB (A) - 65 dB (A)												
Cooling		forced air cooling (redundant and/or demand controlled)												
Operation temperature		–10 to +40°C (up to 55°C optional)												
Storage temperature		-30 to +80°C												
Maximum altitude without derating		1000 masl (up to 4000 masl with derating)												
Allowable relative humidity		< 95% (non-condensing)												
Protection degree		IP20 (up to IP54)												
Colour / Paint		RAL 7035 (other colour optional)												
Safety		IEC/EN 62040-1												
EMC		IEC/EN 62040-2												
Performance & Test		IEC/EN 60146-1-1 / IEC/EN 62040-5-3												
Conformity		CE-Label												
Quality / Environment		ISO 9001:2008 / ISO 14001:2004												
Dimension (IP20, basic configuration)														
Height* (mm)		1900 (2100, 2300 optional)												
Width* (mm)	110 / 125 VDC 1ph	800				1200	1600		1600	2000		2000		2400
	110 / 125 VDC 3 ph													
	220 VDC 1 ph													
	220 VDC 3 ph													
	400 VDC 1 ph													
	400 VDC 3 ph													
Depth* (mm)	110 / 125 VDC 1ph	800							800		1000		1000	
	110 / 125 VDC 3 ph													
	220 VDC 1 ph													
	220 VDC 3 ph													
	400 VDC 1 ph						800							
	400 VDC 3 ph													
Output rating (kVA)		**5**	**10**	**15**	**20**	**30**	**40**	**50**	**60**	**80**	**100**	**120**	**160**	**200**

* dimensions for IP20 and basic configuration
Further data available on request