



Quality Power Supply

SENTRY MPS is an on-line double conversion UPS (VFI SS 111 in accordance with IEC EN 620406-3) with a transformer isolated inverter. With a compact footprint and high power quality output, SENTRY MPS is designed to protect "mission critical" applications including data processing, telecommunications, industrial processes, security and electro-medical systems.

SENTRY MPS is available from 100 to 800kVA in two or four versions each with different harmonic distortion and power factor for better matching the market requirements:

- MPS (100 to 200kVA only),
- MPS LH (100 to 200kVA only),
- MPS Plus,
- MPS Sinus.

Battery Care System:

Maximum Lifetime Potential

Traditionally, when a mains supply is present the UPS charges its batteries. Battery power is used for the inverter should the input supply fail. Efficient battery management and care is therefore essential to the overall performance of the UPS in an emergency. The SENTRY MPS Battery Care System consists of a range of features designed to provide optimum performance and enhanced operating life:

- Dual level charging regime to optimise recharge currents and lower recharge times;
- Temperature compensation and deep discharge protection to reduce overall battery aging;
- Charge blocking system to reduce electrolyte consumption and lengthen the life of VRLA batteries;
- Predictive battery testing to spot potential battery deterioration and failure.

SENTRY MPS is also compatible with different battery technologies: openvase lead acid and AGM and Gel VRLA, NiCd.

Minimum Impact on Supplies – Easy Source

SENTRY MPS technology removes the problems of over sizing downstream power sources, whilst improving load power factors and current harmonics.

The UPS features the latest input current absorption techniques including progressive rectifier start-up and the option to reduce battery charging currents. These features make SENTRY MPS one of the most generator compatible and environmentally friendly UPS available.



Illustrative photo

Flexibility

SENTRY MPS is suitable for a wide range of applications including IT and the most demanding industrial environments suitable for power capacitive loads such as blade servers, without any reduction of the active power, from 0,8 lagging to 0,9 leading. With a broad of accessories and options, complex configurations and system architectures can be achieved to guarantee maximum power availability and the option to add new UPS without interruption to existing users.

Using the UPS Group Synchroniser (USG) and Parallel Systems Joiner (PSJ) sophisticated inter group parallel and redundant

systems can be achieved to provide the highest possible levels of resilience and availability.

Advanced Communication

- Compatible with TeleNetGuard for remote maintenance
- Advanced, multi-platform communication for all operating systems and network environments: Watch&Save 3000 monitoring and shut-down software included, with SNMP agent, for Windows 9x, ME, NT 4.0, 2000, XP, Vista and 2003 server; Mac OS X, Linux, Novell and most popular Unix operating systems
- The UPS is supplied with a cable for direct connection to the PC (Plug and Play)
- RS232 double serial port

- Installation slot for an Emergency Power Off (EPO) interface to allow the UPS to be switched off remotely in an emergency.
- Remote mimic panel (LED or LCD)

Applications

- Servers
- Local Area Network (LAN)
- Data centers
- Telecommunications
- Industrial equipment
- Electro-medical equipment

Easy Installation

SENTRY MPS has a small footprint (only 0,64 sqm for 200kVA and 1,63 sqm for 400kVA). Front access to internal assemblies and top panel ventilation make space allocation within confined data processing or plant rooms easy.

SENTRY MPS can be placed against a wall as there is no requirement for rear or side influencing the initial investment.

Options

- Input isolation transformer
- UPS Group Synchronizer (UGS)
- Parallel System Joiner (PSJ)
- Interface for generator
- LED remote status panel
- LCD-based remote control panel
- Graphic Display Remote panel
- Empty battery cabinets for prolonged runtime



Illustrative photo

Expandability

The units can be connected in parallel up to 8 units to increase power availability or redundancy.

The single module or the system can be expanded any time to suit power requirements without influencing the initial investment.

Thanks to the peculiarity of the "Hot System Expansion" feature, the additional unit can be connected in parallel while the other units are on-line and supplying regular power to the load. The new UPS is on-line and will be set up automatically.

Dual Bus System

The Dual Bus System powers the priority loads from two independent sources.

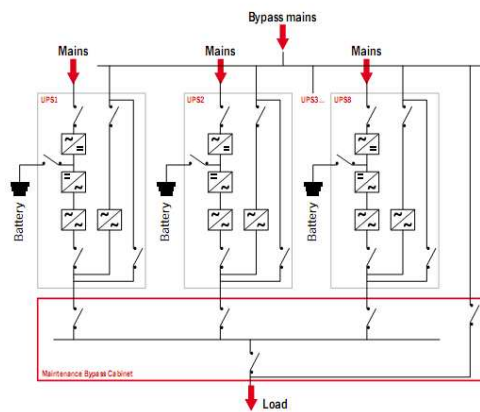
This configuration increases the redundancy and availability level of a multi-module configuration. Each bus may consist of a single module or up to 8 modules in parallel, kept in synchro by the UGS (UPS Group Synchroniser)

Dynamic Dual Bus System

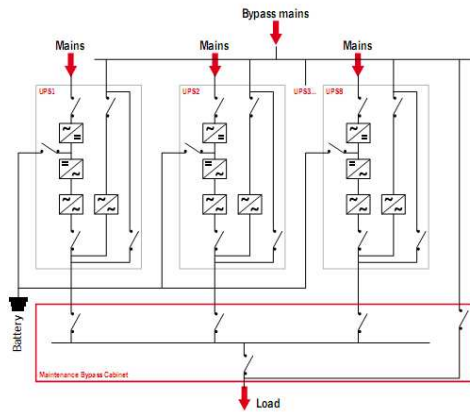
Two independent systems set in Dual Bus Configuration can be merged together at any time for system expansion or maintenance thanks to the PSJ (Parallel System Joiner) option.

This provides a lot of flexibility in your installation in case of maintenance or when it is necessary to change the redundancy level of both systems.

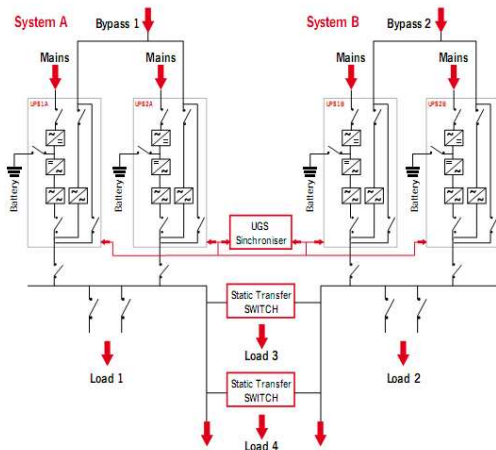
1. Parallel configuration of up to 8 units with separate batteries



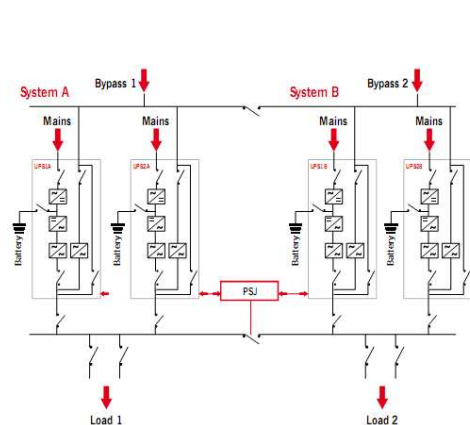
2. Parallel configuration of up to 8 units with a common batteries



3. Dynamic dual bus configuration



4. Dual bus system configuration



Technical Data

Three-phase input
Three-phase output

Models	MPS 100	MPS 120	MPS 160	MPS 200
Power (kVA)	100	120	160	200
Input				
Rated voltage	380 – 400 – 415 Vac 3-phase + N			
Voltage tolerance	400V ± 20%			
Frequency	45 ÷ 65 Hz			
Power factor	> 0,95 in the Sinus version			
Current harmonic distortion	< 3% in the Sinus version			
Soft start	0 ÷ 100% in 30" (configurable)			
Frequency tolerance	± 2% (selectable from ± 1% to ± 5%)			
Standard features	Back Feed protection; separable bypass line			
Batteries				
Type	Lead, open vase acid and VRLA AGM / GÉL; NiCd			
AC ripple current	0			
Temperature compensation	-0,5 V / °C			
Output				
Rated power (kVA)	100	120	160	200
Active power with load from 0.9 cap. To 0.8 ind. (kW)	80	96	128	160
Number of phases	3 + N			
Rated voltage	380 – 400 – 415 Vac three-phase + N (selectable)			
Static stability	±1%			
Dynamic stability	±5% in 10 ms			
Voltage distortion with linear load	≤ 1%			
Voltage distortion with non-linear load	≤ 3%			
Frequency	50 / 60 Hz (configurable)			
Waveform	Sinusoidal			
Crest factor (I _{peak} /I _{rms})	3 : 1			
Overload	110% / 125% / 150% for 60 min / 10 min / 1 min			
System				
Remote signalling	Dry contact (configurable)			
Remote controls	EPO and bypass			
Communication	2 x RS232/C + remote contacts + 2 x communication interface slots			
Efficiency	Up to 94%			
Dimensions (wdh) (mm)	800 x 800 x 1900 (base version)			
Weight (kg)	640	650	770	810
Noise level	63 ÷ 68 dBA / 1m			
Operating temperature	0°C ÷ +40 °C, optimal +15°C / +25°C			
Relative humidity	< 95% non condensing			
Protection	IP20			
Color	Light grey (RAL 7035)			
Compliance	Directives 73/23/EC, 93/68/EC, 89/336/EC Safety: IEC EN 62040-1; EMC EN 62040-2; Performance: IEC EN 62040-3			
Classification as per IEC EN 62040-3	(Voltage Frequency Independent) VFI – SS – 111			

Technical Data

Three-phase input
Three-phase output

Models	MPS 250	MPS 300	MPS 400
Power (kVA)	250	300	400
Input	MPS 250	MPS 300	MPS 400
Rated voltage	380 – 400 – 415 Vac 3-phase + N		
Voltage tolerance	400V ± 20%		
Frequency	45 ÷ 65 Hz		
Power factor	> 0,95 in the Sinus version		
Current harmonic distortion	< 3% in the Sinus version		
Soft start	0 ÷ 100% in 30" (configurable)		
Frequency tolerance	± 2% (selectable from ± 1% to ± 5%)		
Standard features	Back Feed protection; separable bypass line		
Batteries	MPS 250	MPS 300	MPS 400
Type	Lead, open vase acid and VRLA AGM / GĚL; NiCd		
AC ripple current	0		
Temperature compensation	-0,5 V / °C		
Output	MPS 250	MPS 300	MPS 400
Rated power (kVA)	250	300	400
Active power with load from 0.9 cap. To 0.8 ind. (kW)	200	240	320
Number of phases	3 + N		
Rated voltage	380 – 400 – 415 Vac + N (configurable)		
Static stability	±1%		
Dynamic stability	±5% 10 ms		
Voltage distortion with linear load	≤ 1%		
Voltage distortion with non-linear load	≤ 3%		
Frequency	50 / 60 Hz (configurable)		
Waveform	Sinusoidal		
Crest factor (I _{peak} /I _{rms})	3 : 1		
Overload	110% / 125% / 150% for 60 min / 10 min / 1 min		
System	MPS 250	MPS 300	MPS 400
Remote signalling	Dry contact (configurable)		
Remote controls	EPO and bypass		
Communication	2 x RS232/C + remote contacts + 2 x communication interface slots		
Efficiency	Up to 94%		
Dimensions (wdh) (mm)	850 x 1630 x 1900		1000 x 1630 x 1900
Weight (kg)	2200	2200	3600
Noise level	70 dBA / 1m		
Operating temperature	0°C ÷ +40 °C, optimal +15°C / +25°C		
Relative humidity	< 95% non condensing		
Protection	IP20		
Color	Light grey (RAL 7035)		
Compliance	Directives 73/23/EC, 93/68/EC, 89/336/EC Safety: IEC EN 62040-1; EMC EN 62040-2; Performance: IEC EN 62040-3		
Classification as per IEC EN 62040-3	(Voltage Frequency Independent) VFI – SS – 111		

Technical Data

Three-phase input
Three-phase output

Models	MPS 500	MPS 600	MPS 800
Power (kVA)	500	600	800
Input	MPS 500	MPS 600	MPS 800
Rated voltage	380 – 400 – 415 Vac 3-phase + N		
Voltage tolerance	400V ± 20%		
Frequency	45 ÷ 65 Hz		
Power factor	> 0,95 in the Sinus version		
Current harmonic distortion	< 3% in the Sinus version		
Soft start	0 ÷ 100% in 30" (configurable)		
Frequency tolerance	± 2% (selectable from ± 1% to ± 5%)		
Standard features	Back Feed protection; separable bypass line		
Batteries	MPS 500	MPS 600	MPS 800
Type	Lead, open vase acid and VRLA AGM / GĚL; NiCd		
AC ripple current	< 1%		
Temperature compensation	-0,5 V / °C		
Output	MPS 500	MPS 600	MPS 800
Rated power (kVA)	500	600	800
Active power with load from 0.9 cap. To 0.8 ind. (kW)	400	480	640
Number of phases	3 + N		
Rated voltage	380 – 400 – 415 Vac three-phase + N (selectable)		
Static stability	±1%		
Dynamic stability	±5% 10 ms		
Voltage distortion with linear load	≤ 1%		
Voltage distortion with non-linear load	≤ 3%		
Frequency	50 / 60 Hz (configurable)		
Waveform	Sinusoidal		
Crest factor (I _{peak} /I _{rms})	3 : 1		
Overload	110% / 125% / 150% for 60 min / 10 min / 1 min		
System	MPS 500	MPS 600	MPS 800
Remote signalling	Dry contact (configurable)		
Remote controls	EPO and bypass		
Communication	2 x RS232/C + remote contacts + 2 x communication interface slots		
Efficiency	Up to 94%		
Dimensions (wdh) (mm)	3200 x 980 x 1900		4400 x 1000 x 1900
Weight (kg)	3800	4200	5450
Noise level	78 dBA / 1m		
Operating temperature	0°C ÷ +40 °C, optimal +15°C / +25°C		
Relative humidity	< 95% non condensing		
Protection	IP20		
Color	Light grey (RAL 7035)		
Compliance	Directives 73/23/EC, 93/68/EC, 89/336/EC Safety: IEC EN 62040-1; EMC EN 62040-2; Performance: IEC EN 62040-3		
Classification as per IEC EN 62040-3	(Voltage Frequency Independent) VFI – SS – 111		

A2B, s.r.o. reserves the right to change any specifications without prior notice.