group

Working in Electronic Power

Sirius series

on-line UPS

10 – 20 kVA single/single phase and three/single-phase
10 – 40 kVA and 100 – 120 kVA three/three-phase

- LOCAL AREA NETWORKS (LAN)
- SERVERS
- DATA CENTERS
- CASH REGISTERS
- TELECOMUNICATION DEVICES
- E-BUSINESS (SERVERS FARMS, ISP/ASP/POP)
- INDUSTRIAL PLCS
- ELECTRO-MEDICAL DEVICES
- EMERGENCY DEVICES (LIGHTS/ALARMS)

SIRIUS series

Sirius is ideal for the protection of critical information and telecommunications networks which cannot run the risk of being powered from a poor quality electrical supply.

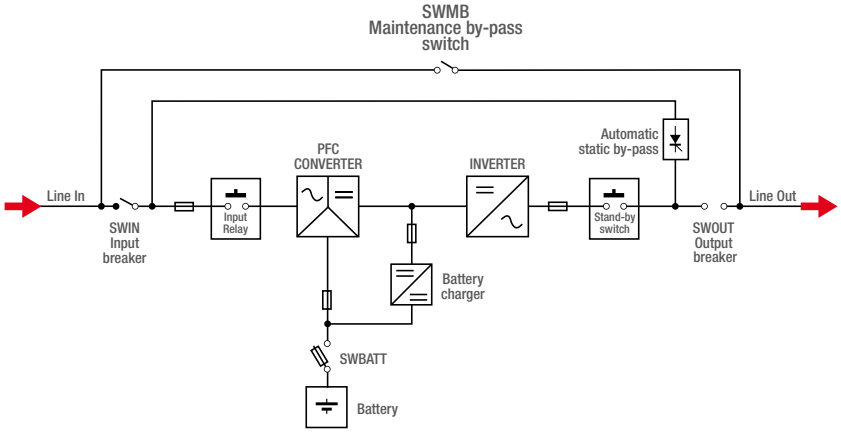
The Sirius series is available in 10-12-15-20 kVA three-phase and single-phase input and single-phase output models, and 10-12-15-20-30-40 and 100-120 kVA three-phase input and output models, with double conversion on-line technology according to the VFI-SS-111 classification, as defined by the IEC EN 62040-3 standard.

Sirius has been designed and manufactured using state-of-the-art technologies in order to deliver maximum protection for critical users, a zero impact on the mains power supply and a high operating efficiency.

The high level of flexibility at the design stage means that there is full compatibility both with three-phase power and with single-phase sources, thus eliminating any critical factors in the connection between UPS and system.

ZERO IMPACT SOURCE

The superior technology of a Sirius allows it be used where the site mains power supply is limited in capacity, or has an on-site generator and/or loads that generate current harmonic problems. Sirius is designed to have a zero-impact on its upstream power supply (mains or generator).



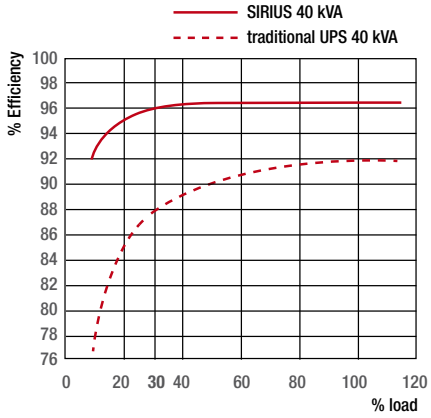
Main Features:

- Reliable, filtered, stabilised and regulated sine wave output (double on-line conversion technology VFI according to EN50091-3 standard) with filters for atmospheric disturbance suppression
- High reliability: IGBT Technology in rectifier and inverter, high frequency PWM, transformer less, fully digital control with microprocessor, no break static and manual transferring
- Zero impact source: power factor correction for unitary power factor and very low input THDI%
- First class in efficiency: high operation efficiency up to 96,5% in normal mode, up to 99% in eco mode operation
- Low noise levels: the high frequency PWM for rectifier and inverter allows very low audible noise
- Flexibility: Sirius can be set for several configuration as normal mode, smart mode and stand by off
- Maximum reliability: Sirius can work in parallel up to 6 units. The UPS continues to operate in parallel even if one of the communication cables is disconnected
- Battery care system: Sirius is suitable for use with sealed VRLA, AGM, GEL or open-vented load acid batteries, Ni-Cd batteries
- Temperature voltage compensation
- Deep discharging controlled by microprocessor with load and main levels (sharing power mode suitable within -40% Vin)
- High power availability: the output factor 0,9 providing up to 15% more active power than a traditional UPS and more load expansion
- Low management cost: the transformer less technology allows the lowest footprint in this category. The Sirius design allows front, top, and sides access

SIRIUS series

Cost Saving in Efficiency

Sirius is the first class in cost saving due to efficiency up to 96.5% providing a 50% saving in energy usage per annum compared to traditional UPS products (92% standard). This exceptional performance can lead to a full initial investment recovery within three years.



SIRIUS 40 kVA
Efficiency at 75% rated load 96%

Power Loss 8400 kWh → 33,5% DIFFERENCE ← Power Loss 12600 kWh

↓

Energy Saved 4200 kWh*

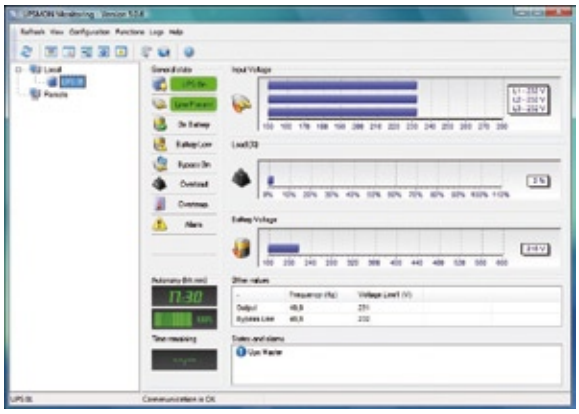
* for standard utility contract at 0,15 €/kWh that means 630 € saved per year.

STANDARD UPS 40 kVA
Efficiency at 75% rated load 88%

UPS Front Panel:

Menu

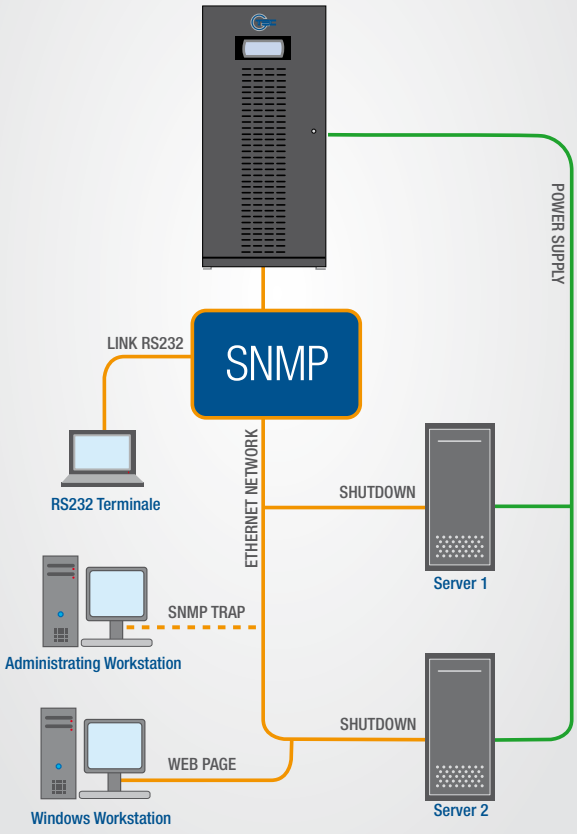
1. System ON
2. System Stand-By
3. Temperature
4. Command
5. History
6. Waveform
7. Diagnostic
8. Configuration



PowerShield³ provides user-friendly UPS management.
The software displays real time information in the form of bar charts and values for critical data such as mains voltage, UPS load and battery charge. It allows remote interrogation of UPS logs and operating parameters to help diagnose alarms and potential fault conditions.

When instructed the software performs an automated safe power down of the protected PCs and file severs.

Direct Connection with Ethernet Network



OPERATING SYSTEMS SUPPORTED

Windows 95-OSR2, 98, Me, NT 4.0, 2000, XP, 2003; Linux; Novell Netware 3.x, 4.x, 5.x, 6; Mac OS X, 9.x; IBM OS/2 Warp and Server; HP OPEN VMS; The most widely used UNIX operating systems such as: IBM AIX, HP UNIX, SUN Solaris INTEL and SPARC, SCO Unix and UnixWare, Silicon Graphic IRIX, Compaq Tru64 UNIX and DEC UNIX, BSD UNIX and FreeBSD UNIX, NCR UNIX.

ADVANCED COMMUNICATION

- Sirius Plus is equipped with a graphic display that provides information, measures, states and alarms regarding the UPS in 5 different languages
- Advanced, multi-platform communication for all operating systems and network environments:
  PowerShield3 monitoring and shut-down software included, for Windows 2008, Vista, 2003, XP; Mac OS X, Linux, Novell and most popular Unix operating systems
- RS232 or USB serial port
- 3 slots for the installation of optional communication accessories such as network adapters and volt-free contacts
- REPO (Remote Emergency Power Off) with which to power down the UPS through a remote emergency pushbutton
- Input for connection of the auxiliary contact of an external manual bypass
- Input for synchronisation from an external source
- Graphic mimic panel display for remote connection

The SNMP network agent allows UPS management across a LAN using any of the main network communication protocols - TCP/IP, HTTP and network interface via SNMP

TECHNICAL **ASSISTANCE** SERVICE

UPService, our technical assistance facility uses highly trained engineers to provide a reliable and competent technical support and after-sales service.

UPService can provide customers with:

- A dedicated CALL CENTRE for connection to the UPService organisation. UPService personnel are always available and ready to provide advice and assistance regarding UPS installation, maintenance, fault finding and repair.

- FAST & READY A fast repair on site is guaranteed through the use of state-of-the-art UPS technology and the professionalism of the UPService personnel and Authorised Assistance Centres. UPService guarantees that failed parts are replaced with original ones, tested and updated in order to maintain the safety, reliability and operating characteristics of the UPS.

- COMMISSIONING AND START-UP UPService can provide assistance during commissioning and startup of the UPS equipment on-site with additional training during handover to site personnel. UPService engineers can also verify site suitability, analyse and advise on potential problems, and disconnect and relocate equipment. UPService recommend that all hardwired installations are commissioned by UPService engineers.

- MAINTENANCE CONTRACTS can be provided by UPService to minimise response times and repair costs. Contracts range from periodic inspections to comprehensive cover including labour and materials.

- UPService organises regular TECHNICAL TRAINING COURSES for UPS operators and installers.

TECHNICAL **ASSISTANCE** SERVICE

SIRIUS series

Technical Specification				
Three/Single phase Model	SR010M	SR012M	SR015M	SR020M
INPUT				
Rated Voltage	380-400-415 Vac three-phase with Neutral / 220-230-240 single-phase			
Rated frequency	50/60 Hz			
Frequency tolerance	40 ÷ 72 Hz			
Power factor at full load	0.99			
Current distorsion	THDI ≤ 3%			
BY PASS				
Rated Voltage	220-230-240 Vac			
Number of phases	1			
Voltage tolerance	180 ÷ 264 V (selectable)			
Rated frequency	50/60 Hz (selectable)			
Frequency tolerance	±5 (selectable)			
OUTPUT				
Rated power (kVA)	10	12	15	20
Active power (kW)	8	9.6	12	16
Output power factor	0.8			
Number of phases	1			
Rated voltage (V)	220-230-240 Vac (selectable)			
Static variation	± 1%			
Dynamic variation	± 3%			
Crest factor (Ipeak/Irms)	3: 1			
Voltage distortion	≤ 1% with linear load / ≤ 3% with non-linear load			
Frequency	50/60 Hz			
Frequency stability on battery mode	0.01%			
Overload at pF 0.8	110% for 10 minutes, 133% for 1 minute, 150% for 5 seconds			
BATTERIES				
Type	VRLA AGM/GEL; Ni-Cd; WET TYPE			
Recharge time	6 h			
ENVIRONMENTAL				
Weight with internal batteries (Kg)	180	182	190	195
Dimensions (HxWxD) (mm)	930 x 320 x 840 / 1320 x 440 x 850 (version SRM X)			
Communication	DOUBLE RS232/C - SNMP Agent - MODBUS - PROFIBUS			
Operating temperature	0°C / +40°C			
Relative humidity	90% non condensing			
Colour	Dark Grey RAL 7016			
Noise	< 52 dBA at 1 m			
Protection rating	IP20			
Efficiency Smart Mode	≥ 98% in Economy mode			
Compliance	European Directives: L V 2006/95/CE Low voltage directive EMC 2004/108/EC Electromagnetic compatibility directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2 Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111			

SIRIUS series

Technical Specification								
Models	SR010T	SR012T	SR015T	SR020T	SR030T	SR040T	SR100T	SR120T
INPUT								
Rated voltage	380-400-415 Vac three-phase with Neutral							
Rated Frequency	50/60 Hz							
Frequency tolerance	40 ÷ 72 Hz							
Power factor at full load	0.99							
Current distortion	THDI ≤ 3%							
BY PASS								
Rated voltage	380-400-415 Vac three-phase with Neutral							
Number of phases	3 + N							
Voltage tolerance	180 ÷ 264 V (selectable)							
Rated frequency	50/60 Hz (selectable)							
Frequency tolerance	±5 (selectable)							
OUTPUT								
Rated power (kVA)	10	12	15	20	30	40	100	120
Active power (kW)	9	10.8	13.5	18	27	36	90	108
Output power factor	0.9							
Number of phases	3 + N							
Rated voltage (V)	380-400-415 Vac (selectable)							
Static variation	± 1%							
Dynamic variation	± 3%							
Crest factor (Ipeak/Irms)	3: 1							
Voltage distortion	≤ 1% with linear load / ≤ 3% with non-linear load							
Frequency	50/60 Hz							
Frequency stability on battery mode	0.01%							
Overload at pF 0.8	115% unlimited, 125% for 10 minutes, 150% for 1 minute, 168% for 5 seconds							
BATTERIES								
Type	VRLA AGM/GEL; Ni-Cd; WET TYPE							
Recharge time	6 h							
ENVIRONMENTAL								
Weight with internal batteries (Kg)	180	182	190	195	335	350	460 (*)	480 (*)
Dimensions (HxWxD) (mm)	1320 x 440 x 850						1900 x 750 x 855	
Communication	DOUBLE RS232/C - SNMP Agent - MODBUS - PROFIBUS							
Operating temperature	0°C / +40°C							
Relative humidity	90% non condensing							
Colour	Dark Grey RAL 7016							
Noise	< 48 dBA at 1 m				< 52 dBA at 1 m		< 65 dBA at 1 m	
Protection rating	IP20							
Efficiency Smart Mode	up to 99%							
Compliance	European Directives: L V 2006/95/CE Low voltage directive EMC 2004/108/EC Electromagnetic compatibility directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2 Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111							

(*) weight **without** battery

G-Tec Group is also present worldwide with Business Partners in several countries.

group

Working in
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