

UPS Product Catalogue

2015



UPS product catalogue | Contents

| | Page |
|---|-------------|
| Company profile | 4-5 |
| UPS technology | 6 |
| Technical problems | 7 |
| Fields of application | 8-9-10 |
| UPS model and capacity | 11 |
| LINE-INTERACTIVE | |
| ↳ Budget pro led 650-2200VA | 12,13 |
| ↳ Budget pro lcd 650-2200VA | 14,15 |
| ↳ Pro blue rack 750-1600VA | 16,17 |
| ↳ Marathon home 800-1500VA | 18,19 |
| ↳ Jupiter pro 1000-3000VA | 20,21 |
| ON-LINE | |
| ↳ Spirit 1000-3000VA | 22-23 |
| ↳ Marathon on-line 1000-3000VA | 24-25 |
| ↳ Spirit XL 1-3kVA (1/1) | 26-27 |
| ↳ Spirit XL II 6/10 kVA (1/1)(3/1) | 28-29 |
| ↳ Spirit II 6/10 kVA (1/1) | 30-31 |
| ↳ Premium VIS 10-30kVA (3/3) | 32-33 |
| ↳ Premium 33+ 10-300kVA (3/3) | 34-35 |
| ↳ VisionMod STR 19" 10-80kVA (3/3) | 36-37 |
| ↳ Marathon 3/3 20kVA/18kW-80kVA/72kW (3/3) | 38-39 |
| ↳ VisionMod modular series 6-50kVA(1/1)(3/1), 20-800kVA (3/3) | 40-41-42-43 |
| HYBRID | |
| ↳ Premium DSP0.9 Hybrid 10-400kVA (3/3) & 10-30kVA (3/1) | 44-45-46-47 |
| ↳ Solar hybrid 1000/2000W | 48-49 |
| STATIC TRANSFER SWITCH | |
| ↳ ATS 16A/32A | 50 |
| ↳ STS 63A/120A | 51 |
| ↳ STS 50-600A | 52-53 |
| BATTERY | |
| ↳ Battery analyzer | 54 |
| ↳ Batteries AGM/Gel/OPZv 2V/6V/12V 7-3000Ah | 55 |
| Options | 56-57 |
| Monitoring | 58 |



For energy saving



Without internal batteries,
perfect solution for very long time backup

Vision UPS Luxembourg



- European quality and reputation
- Large stock facilities
- Custom-made products
- After sales service
- Wide range of products

Vision UPS Systems

VISION UPS SYSTEMS S.a.r.l. was set up in 2003 in Luxembourg with headquarters in Luxembourg and France (since 2015). We became a worldwide recognized company with partners in 40 countries all over the world.



Worldwide

VISION UPS products are running on every continent.



Our philosophy

Training

VISION offers to all customers free technical and commercial training.

Installation and Maintenance

VISION offers—in addition to standard instructions—specified technical documentation for installation and maintenance. This allows technical and maintenance staff to save time on-site and minimize the source of error.

Assistance

VISION considers his part of responsibility for all products during and after the term of warranty. For this we offer technical support and assistance together with our engineers.

Customized solutions

In common with you and your clients we can offer customized products.



References

Some of our partner projects :



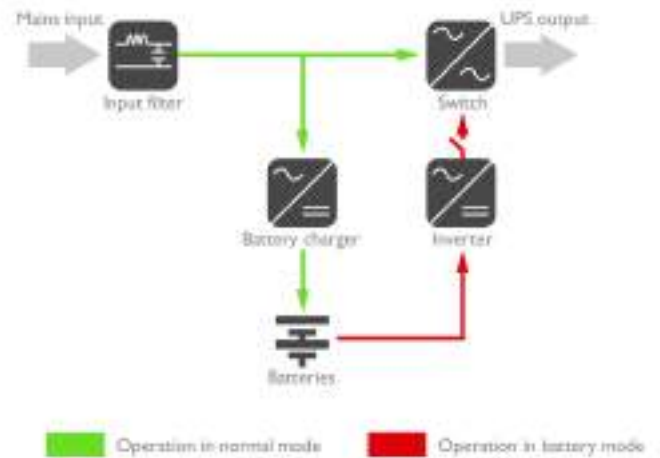
And more...

Technology | Off-Line

VFD - Voltage & frequency dependant

Passive standby topology (off-line) is a frequently used UPS topology for protecting against **blackout**. In normal mode, the UPS supplies power to the application directly from the mains, filtered but without active conversion. The battery is charged from the mains. In the event of a power cut or fluctuation, the UPS delivers stable power from the battery. The advantages of this topology are low cost and adequacy for office environments. Passive standby topology is not suitable if the power supply is of lower quality (industrial sites).

Average switching time to battery mode : 10ms

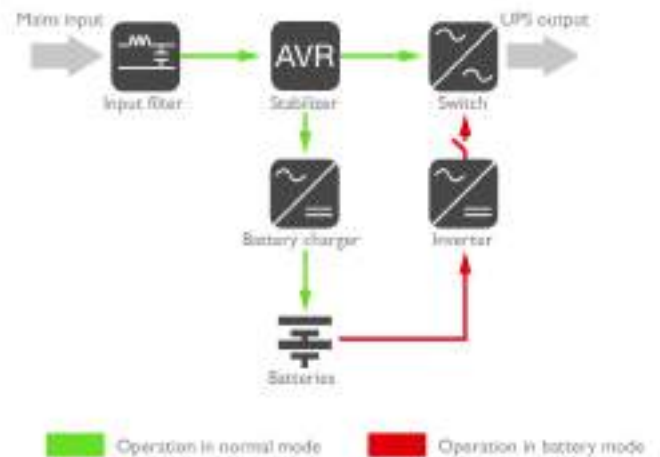


Technology | Line-Interactive

VI - Voltage independant

Line interactive topology is mostly used for enterprise networks and IT applications. It protects from **blackout**, **undervoltage** and **overvoltage**. In normal mode, the device is controlled by a microprocessor that monitors the quality of the supply and reacts to fluctuations. A voltage stabilizer (AVR) is enabled to boost or reduce the supply voltage to compensate the input voltage fluctuations. The main advantage of this topology is that it enables compensation of under and overvoltage without using the batteries.

Average switching time to battery mode : 4-10ms



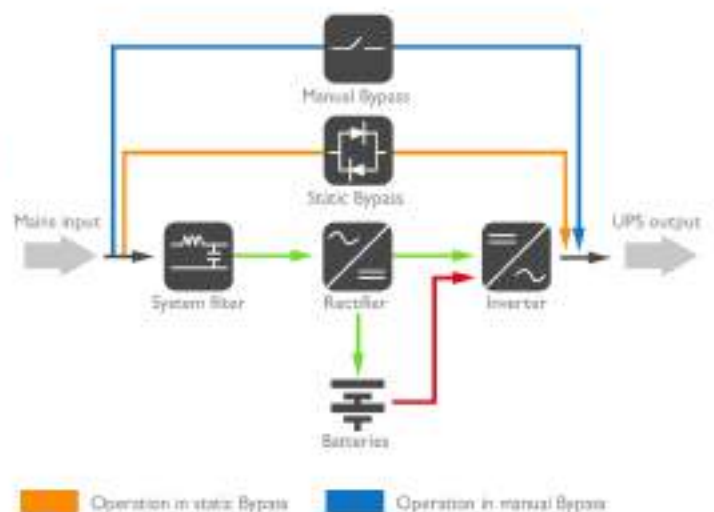
Technology | On-Line

VFI - Voltage & frequency independant

Double conversion topology (on-line) is a basis for UPS designed for continuous power protection from all eight power problems: **power failure**, **undervoltage**, **overvoltage**, **frequency variation**, **voltage harmonics**, **voltage distortion**, **high-frequency transient**, (**power surge** with galvanic isolation). It ensures a consistent quality of power supply regardless of disturbances in the incoming mains. The output voltage is entirely regenerated by a sequence of AC to DC conversion followed by DC to AC conversion in order to create a 100% clean power. Double conversion UPSs can be used with any type of equipment as there is no switching when changing over to battery power.

Switching time to battery mode : 0ms

■ Operation in normal mode ■ Operation in battery mode ■ Operation in static Bypass ■ Operation in manual Bypass



Technical problems | Vision solutions

Technology | Off-Line (VFD)

Protection against :



Blackout

Due to the lower protection level, this type is not recommended/produced by Vision UPS.

Technology | Line-interactive (VI)

Protection against :



Blackout



Overvoltage



Undervoltage

Technology | On-line (VFI)

Protection against :



Blackout



Overvoltage



Undervoltage



High-frequency
transient



Frequency
variation



Voltage
harmonics



Voltage
distortion



Power surge
(lightning...)



Application | Home



Marathon Home
800-1500VA



Pro Blue Rack
750-1600VA



Budget Pro LED
650-2200VA



Budget Pro LCD
650-2200VA



Solar Hybrid
1000-2000W



Jupiter Pro
1000-3000VA



Spirit
1000-3000VA



Marathon On-line
1000-3000VA



Marathon 3/3
20kVA/18kW-
80kVA/72kW (3/3)



Premium DSP.09H
10-400kVA (3/3)
10-30kVA (3/1)



Application | Alarm & Computer



Marathon Home
800-1500VA



Pro Blue Rack
750-1600VA



Budget Pro LED
650-2200VA



Budget Pro LCD
650-2200VA



Solar Hybrid
1000-2000W



Jupiter Pro
1000-3000VA



Spirit
1000-3000VA



Marathon On-line
1000-3000VA



Application | IT server

| | | | | |
|--|--|---|---|--|
|  |  |  |  |  |
| Pro Blue Rack 750-1600VA | Spirit XL 1-3kVA (1/1) | Spirit II 6/10kVA (1/1) (3/1) | Spirit XL II 6/10kVA (1/1) (3/1) | Premium VIS 10-30kVA (3/3) |
|  |  |  |  |  |
| Marathon 3/3 20kVA/18kW- 80kVA/72kW (3/3) | Premium DSP.09H 10-400kVA (3/3) 10-30kVA (3/1) | ATS 16A/32A | STS 63A/120A | STS 50-600A |



Application | Datacenter

| | | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| Spirit XL 1-3kVA (1/1) | Spirit XL II 6/10kVA (1/1) (3/1) | Marathon 3/3 20kVA/18kW- 80kVA/72kW (3/3) | Premium DSP.09H 10-400kVA (3/3) 10-30kVA (3/1) | VisionMod STR 19" 10-80kVA (3/3) |
|  |  |  |  | |
| Vision Mod 6-50kVA (1/1)(3/1) 20-800kVA (3/3) | ATS 16A/32A | STS 63A/120A | STS 50-600A | |



Application | Healthcare



Spirit XL
1-3kVA (1/1)



Spirit
1000-3000VA



Marathon On-line
1000-3000VA



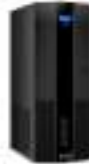
Spirit II
6/10kVA (1/1) (3/1)



Premium 33+
10-300kVA (3/3)



Premium VIS
10-30kVA (3/3)



Premium DSP.09H
10-400kVA (3/3)
10-30kVA (3/1)



VisionMod STR 19"
10-80kVA (3/3)



Vision Mod
6-50kVA (1/1)(3/1)
20-800kVA (3/3)



STS
50-600A



Application | Industry



Marathon 3/3
20kVA/18kW-
80kVA/72kW (3/3)



Premium 33+
10-300kVA (3/3)



Premium DSP.09H
10-400kVA (3/3)
10-30kVA (3/1)



VisionMod STR 19"
10-80kVA (3/3)



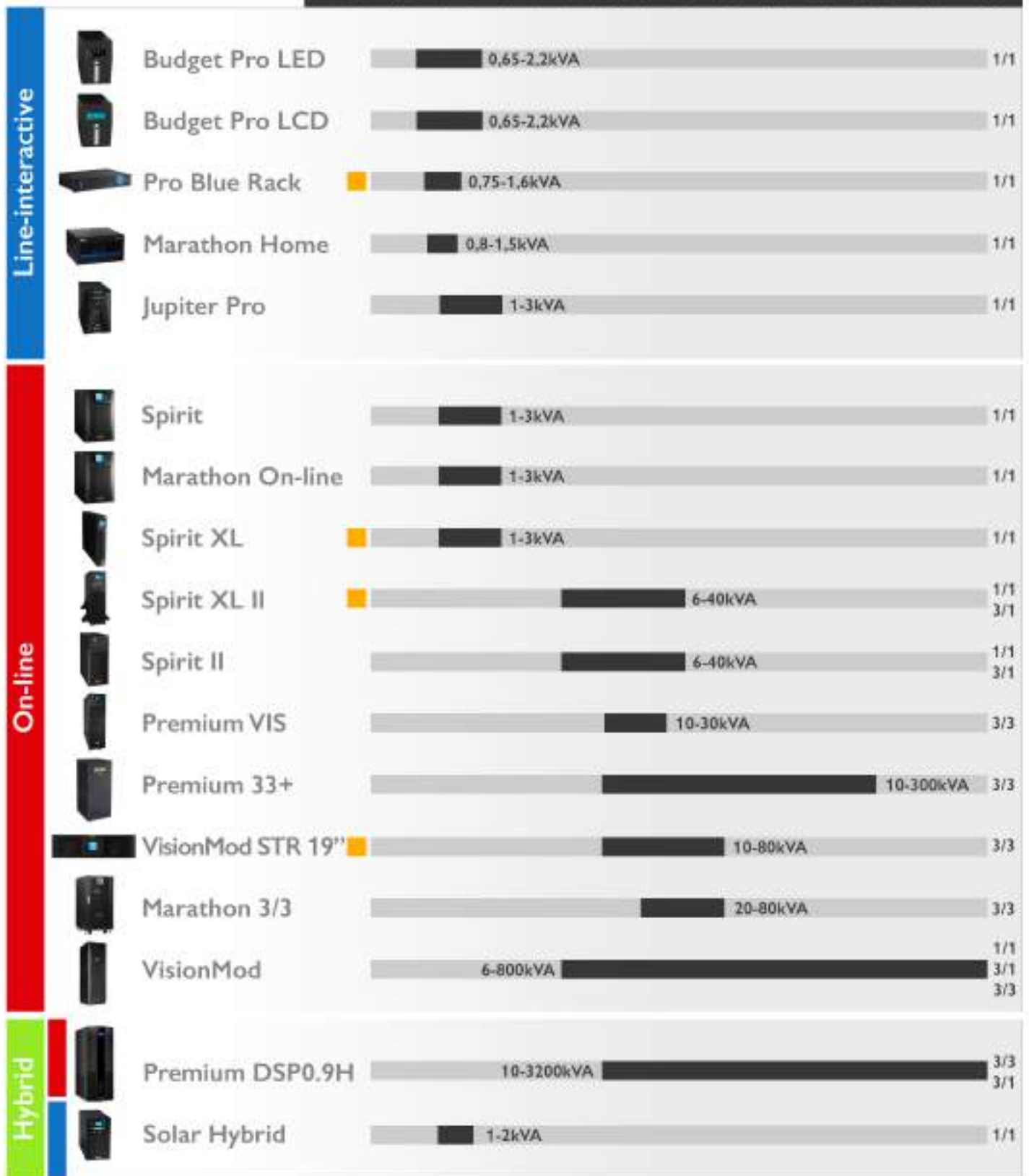
Vision Mod
6-50kVA (1/1)(3/1)
20-800kVA (3/3)



STS
50-600A

UPS Model | Capacity

kVA: 0,5 1 2 3 4 6 10 20 40 80 100 200 300 400 >700

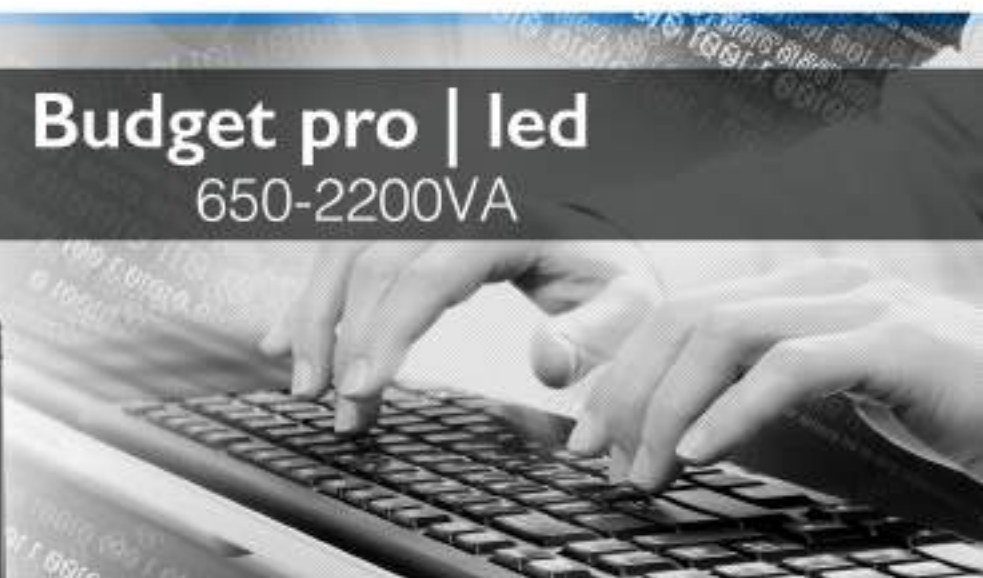


■ Solution for 19" Rack cabinet

In/Out

Budget pro | led

650-2200VA



LINE-INTERACTIVE

Applications



LED display



The comprehensive LED display provides easy read-out status of the UPS :

- working on grid or battery
- battery level in case of blackout
- fault indicator
- load level

Specifications

- Line-interactive technology (VI)
- Automatic Voltage Regulator (AVR, "Boost and Buck")
- Transfer to battery at under and over voltage
- LED display
- Self-diagnostic function
- Battery cold start
- Genset-compatible
- Auto-charging in Off-Mode
- Auto-restart function
- Automatic computer shutdown
- Audible and visible alarm
- Surge protection
- RJ45/11 protection (EMI/RFI filtering)
- USB interface including software
- 2-years warranty (electronics)

The budget pro led series, featured with smart microprocessor control design, AVR boost and buck, smart USB interface and cold start function, is a cost-effective solution to your mission-critical PC and valuable peripherals.

The AVR Boost and Buck automatically corrects either under-voltage or over-voltage condition without unnecessary battery drain and extends the life of the battery.





Smart USB



It offers real-time power and UPS status monitoring with automatic or scheduled shutdown and many other advanced power management functions.

Monitoring Software Included



Monitoring software for Windows, Mac, Linux is included.

| Budget pro led | Model | | | | | |
|------------------------------------|---|-------------|-------------|------|---------------|--------|
| | 650 | 850 | 1100 | 1300 | 1600 | 2200 |
| Nominal capacity (VA) | 650 | 850 | 1100 | 1300 | 1600 | 2200 |
| Power (Watt) | 360 | 480 | 600 | 720 | 900 | 1200 |
| Voltage | 220/230/240V / 110/120V | | | | | |
| Input voltage range | 162-290V / 81-145V | | | | | |
| Voltage stabilizer AVR | Boost and trim | | | | | |
| Input frequency range | 50/60Hz (auto sensing) | | | | | |
| AC output voltage (battery mode) | +/- 10% | | | | | |
| AC output frequency (battery mode) | 50/60Hz +/-1Hz | | | | | |
| Transfer time | Typical : 2-6ms / maximum : 10ms | | | | | |
| Waveform | Simulated sine wave | | | | | |
| Battery (voltage and amount) | 12V (1x7Ah) | 12V (1x9Ah) | 24V (2x7Ah) | | 24V (2x9Ah) | |
| Backup time | 5-10 minutes | | | | | |
| Typical recharge time | 6-8 hours recover to 90% capacity | | | | | |
| Outlets IEC (schuko on request) | 4 outlets (650-1300VA) / 6 outlets (1600-2200VA) | | | | | |
| Interface | USB-port | | | | | |
| Protection | RJ45/11 (telephone/modem) overload - short circuit - discharge - overcharge | | | | | |
| Visual indication | LED display | | | | | |
| Acoustic indication | Battery mode - low battery - overload - battery replacement alarm - fault | | | | | |
| Humidity / Noise level | 0-90% at 0-40°C (non condensing) / less than 40dB | | | | | |
| Dimensions WxDxH | 101x302x142 mm | | 149x338x160 | | 158x380x196mm | |
| Weight | 4,3Kg | 4,9Kg | 7,8Kg | 8Kg | 11,1Kg | 11,5Kg |
| Warranty | 2 years (electronics) | | | | | |
| Software | For Windows, Mac, Linux | | | | | |

Budget pro | lcd

650-2200VA



Applications



LCD display



The comprehensive graphic display provides easy read-out status of the UPS from the screen, such as input, voltage, load level, battery level...

Specifications

- Line-interactive technology (VI)
- Automatic Voltage Regulator (AVR, "Boost and Buck")
- Transfer to battery at under and over voltage
- Big LCD-display
- Self-diagnostic function
- Battery cold start
- Genset-compatible
- Auto-charging in Off-Mode
- Auto-restart function
- Automatic computer shutdown
- Audible and visible alarm
- Surge protection
- RJ45/11 protection (EMI/RFI filtering)
- USB interface including software
- 2-years warranty (electronics)

The budget pro lcd series, featured with smart microprocessor control design, AVR boost and buck, smart USB interface and cold start function, is a cost-effective solution to your mission-critical PC and valuable peripherals.

The AVR Boost and buck automatically corrects either under-voltage or over-voltage condition without unnecessary battery drain and extends the life of the battery.





Smart USB



It offers real-time power and UPS status monitoring with automatic or scheduled shutdown and many other advanced power management functions.

Monitoring Software Included



Monitoring software for Windows, Mac, Linux is included.

| Budget pro lcd | Model | | | | | |
|------------------------------------|---|-------------|-------------|------|---------------|--------|
| | 650 | 850 | 1100 | 1300 | 1600 | 2200 |
| Nominal capacity (VA) | 650 | 850 | 1100 | 1300 | 1600 | 2200 |
| Power, (Watt) | 360 | 480 | 600 | 720 | 900 | 1200 |
| Voltage | 220/230/240V / 110/120V | | | | | |
| Input voltage range | 162-290V / 81-145V | | | | | |
| Voltage stabilizer AVR | Boost and buck | | | | | |
| Input frequency range | 50/60Hz (auto sensing) | | | | | |
| AC output voltage (battery mode) | +/- 10% | | | | | |
| AC output frequency (battery mode) | 50/60Hz +/-1Hz | | | | | |
| Transfer time | Typical : 2-6ms / maximum : 10ms | | | | | |
| Waveform | Simulated sine wave | | | | | |
| Battery (voltage and amount) | 12V (1x7Ah) | 12V (1x9Ah) | 24V (2x7Ah) | | 24V (2x9Ah) | |
| Backup time | 5-10 minutes | | | | | |
| Typical recharge time | 6-8 hours recover to 90% capacity | | | | | |
| Outlets IEC (schuko on request) | 4 outlets (650-1300VA) / 6 outlets (1600-2200VA) | | | | | |
| Interface | USB-port | | | | | |
| Protection | RJ45/11 (telephone/modem) overload - short circuit - discharge - overcharge | | | | | |
| Visual indication | Big LCD display | | | | | |
| Acoustic indication | Battery mode - low battery - overload - battery replacement alarm - fault | | | | | |
| Humidity / Noise level | 0-90% at 0-40°C (non condensing) / less than 40dB | | | | | |
| Dimensions WxDxH | 101x302x142 mm | | 149x338x160 | | 158x380x196mm | |
| Weight | 4,3Kg | 4,9Kg | 7,8Kg | 8Kg | 11,1Kg | 11,5Kg |
| Warranty | 2 years (electronics) | | | | | |
| Software | For Windows, Mac, Linux | | | | | |

Pro Blue Rack

750 - 1600VA



Applications



The best quality/price ratio

The Pro Blue Rack is an ideal solution for small server IT 19" Rack. Due to its small depth (310 mm) the UPS can fit in almost all 19" cabinets.

LINE-INTERACTIVE

Specifications

- Line-interactive technology (VI)
- Transfer to battery at under and over voltage
- UPS with intelligent LCD display
- Automatic computer shutdown
- Automatic voltage regulator (AVR, "Boost and Buck")
- Very wide input and voltage range
- Battery (DC) cold start
- Overload and short circuit protection
- RJ11 telephone line protection
- Audible and visible alarm
- USB interface including software

• 2 years warranty (electronics)

LCD display indicator

The multi functional indicator operates with blue backlight LCD and shows all input, output, load and battery parameters.





Smart USB



It offers real-time power and UPS status monitoring with automatic or scheduled shutdown and many other advanced power management functions.

Monitoring Software Included



Monitoring software for Windows, Mac, Linux is included.

LINE-INTERACTIVE

| Pro Blue Rack | Model | | | |
|---------------------------------------|----------------------------------|------------|------------|------------|
| | 750VA | 1000VA | 1200VA | 1600VA |
| Power (Watt) | 450 | 600 | 720 | 960 |
| Input voltage range | 165 - 265VAC | | | |
| Voltage stabilizer (AVR) | Boost & Buck | | | |
| Input frequency range | 50Hz | | | |
| Output waveform | Simulated sine wave | | | |
| Output voltage (line mode) | 220/230VAC (+/-10%) | | | |
| Output voltage (battery mode) | 220/230VAC (+/-5%) | | | |
| Output frequency (battery mode) | 50Hz (+/-1%) | | | |
| Battery (capacity X amount) | 9Ah x 1 | 7Ah x 2 | 9Ah x 2 | 9Ah x 2 |
| Backup time (typical computer load) | 10-35 min | | 10-65 min | |
| IEC outlets (amount) | 3 | | 4 | |
| Interface | USB | | | |
| RJ11 protection | Yes | | | |
| Dimensions HxWxD, mm | 2Ux483x310 | 2Ux483x310 | 2Ux483x310 | 3Ux483x310 |
| Weight, Kg | 8,7 | 12,5 | 13,5 | 15,8 |
| Overload and short circuit protection | Yes | | | |
| Noise suppression | Yes | | | |
| Software (UPSilon 2000) | Software for Windows, Mac, Linux | | | |

Marathon Home

800-1500VA



Specifications

- Line-interactive technology (VI) with pure sine wave output
 - Only with external batteries
 - Big charger: 10/20A adjustable
 - Automatic Voltage Regulator - AVR
 - Transfer to battery at under and over voltage
 - LED indication
 - Battery (DC) cold start
 - Wide input voltage range: 130-290VAC
 - Fully digitalized microprocessor controlled
 - Energy saving function with UPS Green Mode
 - Audible and visible alarm
 - Surge protection
 - Wide application range: Charger/Inverter/UPS
- 2 years warranty (electronics)

Applications



Perfect for home applications

Only available with external batteries for long backup time. Perfect for all home and domestic applications.

Backup time table (with external battery pack)

| UPS with battery pack | | Load in Watts | | | | | | |
|-------------------------|-------------------|---------------|--------|--------|--------|--------|------------------|-----------------|
| | | 150W | 300W | 400W | 600W | 800W | 1000W | 1200W |
| Marathon Home 800VA | BP0265 | 460min | 210min | 150min | 90min | | | |
| | BP02100 | 750min | 360min | 240min | 160min | | | |
| Marathon Home 1000VA | BP0465 | 1300min | 560min | 330min | 210min | 160min | | |
| Marathon Home 1500VA | BP0465 BP04100 | | | | | | 120min 210min | 90min 160min |

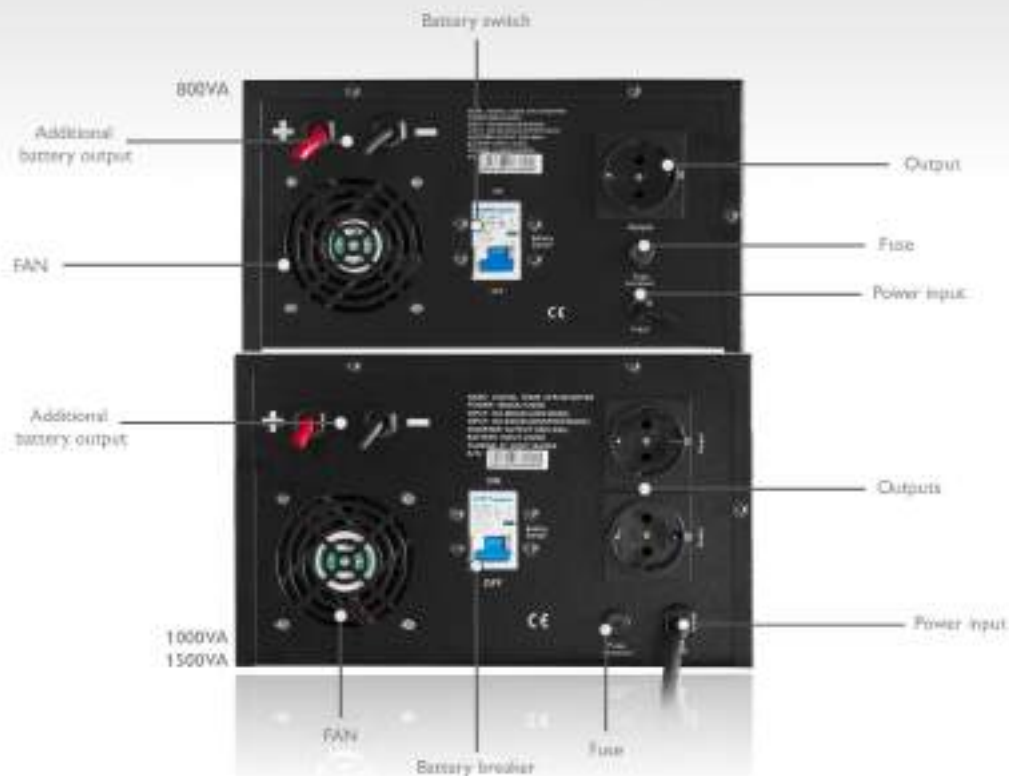
Backup times in minutes



Cabinet for 4 batteries
BP0465 and BP04100

Cabinet for 2 batteries
BP0265 and BP02100





| Marathon Home | Model | | |
|--|--|---------------|--------|
| | 800VA | 1000VA | 1500VA |
| Power (watt) | 640W | 800W | 1200W |
| Technology | Line-interactive UPS (VI, voltage independent) | | |
| — Input | | | |
| Min. voltage UPS-mode/inverter mode | 145VAC / 120VAC | | |
| Max. voltage UPS-mode/inverter mode | 285VAC / 300VAC | | |
| Frequency | 38-70Hz | | |
| Input power factor | ≥ 0.95 | | |
| — Output | | | |
| Voltage | 220/230VAC | | |
| Waveform | Pure sine wave | | |
| Frequency | 50Hz +/- 1Hz | | |
| Voltage stabilization | 220VAC +/- 10% | | |
| Crest factor | 2,5 : 1 | | |
| Efficiency | ≥ 92% | | |
| — Battery | | | |
| Type | VRLA | | |
| Voltage | 12VDC | | 24VDC |
| Internal charger power (without batteries) | 10/20A | | |
| — Protection | | | |
| Input / Output protection against | Overload - Temperature - Short circuit | | |
| — Alarms | | | |
| Audible alarm | Yes | | |
| LED alarm | Yes | | |
| — Standard | | | |
| Certificates | CE-Certificate, ISO, GOST | | |
| — Environment | | | |
| Temperature / Altitude / Humidity | 0-40°C / less than 1500m / 0-95% | | |
| Audible noise at 1m | < 50dB | | |
| — Dimensions | | | |
| Weight (without batteries) | 13,4kg | 15kg | 18,6kg |
| WxDxH | 272x285x165mm | 320x295x186mm | |

Jupiter Pro

1000-3000VA



LINE-INTERACTIVE

Applications



Intelligent LCD Display



The intelligent graphic LCD display provides easy read-out status of the UPS from the screen, such as input, output, voltage, load level, battery level...

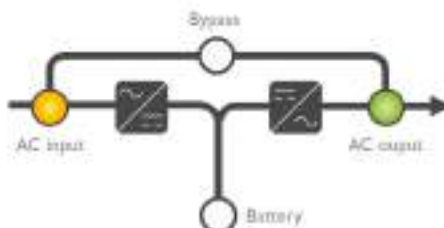
Specifications

- Line-interactive technology (VI)
- Automatic voltage regulator (AVR, Boost & Buck)
- Battery transfer at under and over voltage
- Including software for automatic computer shutdown
- Internal static bypass
- Pure sinewave output
- Intelligent LCD display
- Battery DC cold start
- Audible and visible alarm
- Overload and short circuit protection
- RJ11 protection
- Surge protection
- USB interface

Option:

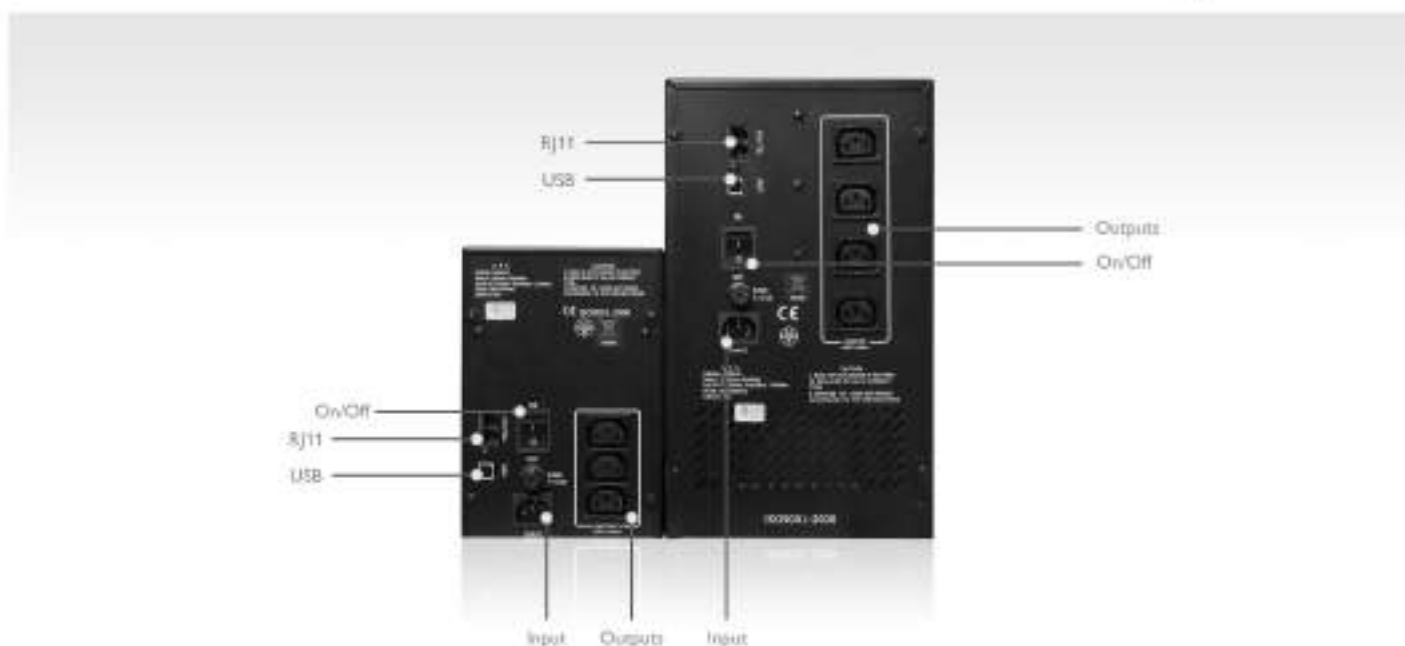
- SNMP-card (external)
- 2-years warranty (electronics)

Internal Static and Automatic Bypass



The Jupiter Pro is a line-interactive UPS with an internal static bypass. This technology is normally used in on-line UPS to increase the reliability. In case of an internal electronic problem or an overload situation, the UPS automatically switches to bypass mode.





Smart USB



It offers real-time power and UPS status monitoring with automatic or scheduled shutdown and many other advanced power management functions.

Monitoring Software Included



Monitoring software for Windows, Mac, Linux is included.

LINE-INTERACTIVE

| Jupiter Pro | Model | | | |
|---------------------------------|--------------------------------------|---------------|---------------|---------------|
| | 1000 | 1500 | 2000 | 3000 |
| Nominal capacity (VA) | 1000 | 1500 | 2000 | 3000 |
| Power (Watt) | 600 | 900 | 1200 | 1800 |
| Input voltage range | 165-280VAC (option : 145-280VAC) | | | |
| Voltage stabilizer AVR | Boost & Buck | | | |
| Input frequency range | 50/60Hz | | | |
| Output voltage (line mode) | 190-245VAC | | | |
| Output voltage (battery mode) | 220/230VAC (+/-5%) - pure sine wave | | | |
| Output frequency (battery mode) | 50/60Hz +/-1% | | | |
| Battery (capacity x amount) | 7Ah x2 | 8Ah x2 | 8Ah x3 | 8Ah x4 |
| Backup time | 10-35min (for typical IT-load) | | | |
| IEC outlets (amount) | 3 | 3 | 3 | 4 |
| Interface | USB (standard) SNMP (option) | | | |
| RJ11 protection | Standard | | | |
| Dimensions WxDxH | 145x360x215mm | 145x360x215mm | 145x430x215mm | 200x475x337mm |
| Weight | 11,5kg | 13,2kg | 17,9kg | 26,3kg |
| Overload protection | Yes | | | |
| Short circuit protection | Yes | | | |
| Noise suppression | Yes | | | |
| Warranty | 2 years (electronics) | | | |
| Software | UPSilon 2000 for windows, Mac, Linux | | | |

Spirit

1000 - 3000VA



Applications



2 Sizes and 3 Powers



2000/3000VA 1000VA



Specifications

- On-line "double conversion" technology (VFI)
- DSP (Digital Signal Processor) technology
- Internal static and manual bypass
- Input power factor up to 0.99
- Battery (DC) cold start
- Site wiring fault indication
- Self testing at UPS startup
- RJ45/11 network protection
- Intelligent management through RS232 & USB
- For extended backup time check MARATHON series (external batteries)

Options:

- SNMP adapter
- Relay card (dry contacts)
- External maintenance bypass
- Additional / external battery packs
- 2 years warranty (electronics)

The best quality/price ratio !



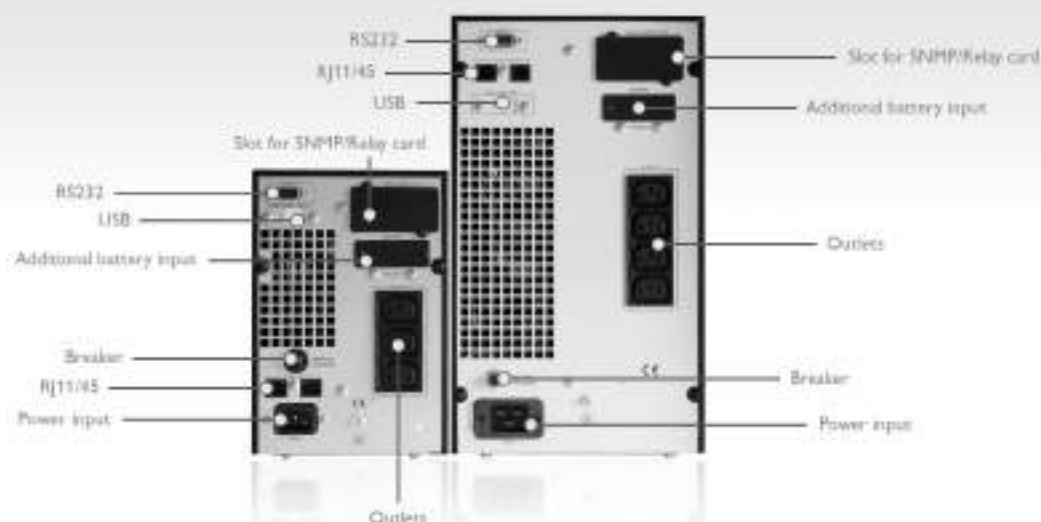
The comprehensive graphic display provides easy read-out status of the UPS from the screen, such as input, voltage, load level, battery level, error code...

Monitoring Software Included

Smart USB



It offers real-time power and UPS status monitoring with automatic or scheduled shutdown and many other advanced power management functions.



| Spirit | Model | | |
|-----------------------------------|--|---------------|---------------|
| | 1000VA | 2000VA | 3000VA |
| Power (Watt) | 800W | 1600W | 2400W |
| — Input | | | |
| Minimum voltage | 160/115VAC (at 100/50% load) | | |
| Maximum voltage | 290/295VAC (at 100/50% load) | | |
| Frequency | 45-55Hz +/- 0,5Hz or 55Hz-65Hz +/- 0,5Hz (auto sensing) | | |
| Input power factor | ≥ 0.99 | | |
| Bypass voltage range | 186-252VAC | | |
| Harmonic distortion (THD) | ≤ 7% at 100% non-linear load | | |
| — Output | | | |
| Voltage | 200/208/220/230/240VAC | | |
| Waveform | Pure sine wave | | |
| Harmonic distortion (THD) | < 3% at 100% linear load | | |
| Frequency | 50/60Hz +/- 0,2% | | |
| Voltage stabilization | +/- 2% | | |
| Crest factor | 3:1 | | |
| Efficiency at 75-100% load | >88% (AC mode) / >90% (battery mode) / >94% (ECO mode) | | |
| — Battery (internal) | | | |
| Type | VRLA | | |
| Voltage | 24VDC (2x9Ah) | 48VDC (4x9Ah) | 72VDC (6x9Ah) |
| Backup time | 5-8 min with internal batteries / extendable with external batteries | | |
| Internal charger power | 1A | | |
| — Protection | | | |
| RJ11/45 protection | Yes | | |
| Input / Output protection against | Overload - Temperature - Short circuit | | |
| Overload in battery mode | 100%+/-5%+load<150%+/-5% exceeds 30s cut off & alarm, 150%+/-5%+load<200%+/-5% exceeds 300ms, cut off & alarm | | |
| Overload in utility mode | 100%+/-5%+load<100%+/-5% exceeds 30s transfer to bypass & alarm, 100%+/-5%+load<200%+/-5% exceeds 300ms transfer to bypass & alarm | | |
| — Alarms | | | |
| Audible alarm | Battery backup, battery low, overload status, fault status | | |
| LED alarm | Mains, inverter, bypass, fault, battery level | | |
| LCD display | Input & output voltage, load, battery voltage, error codes | | |
| — Bypass | | | |
| Type | Internal automatic static and manual bypass (external bypass optional) | | |
| — Environment | | | |
| Temperature / Altitude / Humidity | 0-40°C / Less than 1500m / 0-95% non-condensing | | |
| Audible noise at 1m | < 50dB | | |
| — Interface | | | |
| Standard | RS232 / USB (software included) | | |
| Optional | SNMP / Relay card (dry contacts) | | |
| — Dimensions | | | |
| Weight | 10,5Kg | 22Kg | 27kg |
| WxDxH | 144x361x215mm | | |
| — Standard | | | |
| Certificate | CE-Certificate | | |

ON-LINE

Marathon on-line

1000 - 3000VA



Applications



2 Sizes and 3 Powers



2000/3000VA 1000VA



Specifications

- On-line "double conversion" technology (VFI)
- Perfect for very long backup time (Marathon)
- DSP (Digital Signal Processor) technology
- ECO-Mode for energy-saving
- Internal static and manual bypass
- Intelligent management through USB-interface
- Site wiring fault indication
- Wide input voltage range
- Battery (DC) cold start
- Self testing at UPS startup
- Bypass voltage range can be set
- RJ45/11 network protection
- Input PFC up to 0.99
- Software and USB cable included

Options:

- SNMP card
- Dry contacts/relay
- Marathon XL on request
- 2 years warranty (electronics)

Backup time table (with external battery pack)

| | | Load in Watts | | | | | | | | | |
|-----------------------|-------------|---------------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| UPS with battery pack | | 150W | 300W | 400W | 600W | 800W | 1000W | 1200W | 1600W | 1900W | 2400W |
| Marathon 1800VA | BP0285-6A | 460min | 210min | 150min | 90min | 60min | | | | | |
| | BP02100-12A | 750min | 360min | 240min | 150min | 100min | | | | | |
| Marathon 2000VA | BP0465-6A | 1300min | 560min | 330min | 210min | 160min | 120min | 90min | 60min | | |
| | BP04100-12A | 2100min | 1000min | 600min | 390min | 260min | 210min | 160min | 100min | | |
| Marathon 3000VA | BP0665-6A | 2050min | 850min | 600min | 400min | 250min | 190min | 150min | 100min | 85min | 60min |
| | BP06100-12A | 3300min | 1450min | 1000min | 650min | 420min | 320min | 240min | 180min | 150min | 100min |

Backup times in minutes

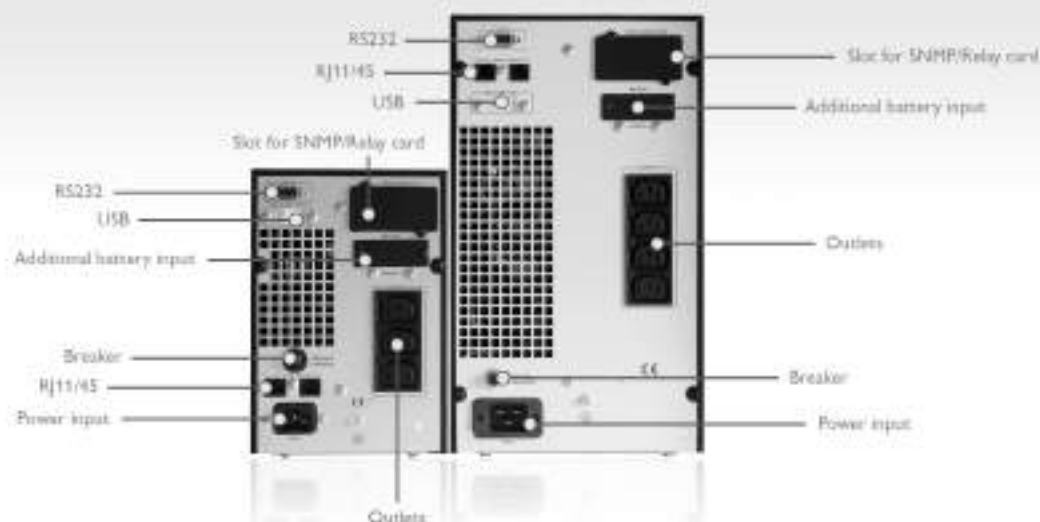
Dimensions (DxWxH) and Weight:

- BP0285-6A - 482x470x360mm, 54kg
- BP02100-12A - 482x470x360mm, 86kg
- BP0465-6A - 482x480x690mm, 107kg
- BP04100-12A - 482x480x690mm, 136kg
- BP0665-6A - 600x480x890mm, 163kg
- BP06100-12A - 600x480x890mm, 197kg

Cabinet for 6 batteries

Cabinet for 2 batteries





| Marathon on-line | Model | | |
|--|--|---------------|--------|
| | 1000VA | 2000VA | 3000VA |
| Power (Watt) | 800W | 1600W | 2400W |
| Technology | On-line | | |
| — Input | | | |
| Minimum voltage | 160/115VAC (at 100/50% load) | | |
| Maximum voltage | 290/295VAC (at 100/50% load) | | |
| Frequency | 45-65Hz +/- 5,5Hz (auto sensing) | | |
| Input power factor | ≥ 0,99 | | |
| Bypass voltage range | 186-252VAC | | |
| — Output | | | |
| Voltage | 200/208/220/230/240VAC | | |
| Waveform | Pure sine wave | | |
| Frequency | 50/60Hz +/- 0,2% | | |
| Voltage stabilization | +/-2% | | |
| Crest factor | 3:1 | | |
| Efficiency at 75-100% load | >88% (AC mode) / >90% (battery mode) / >94% (ECO mode) | | |
| — Battery (external) | | | |
| Type | VRLA | | |
| Voltage | 24VDC | 48VDC | 72VDC |
| Internal charger power (without batteries) | 6A or 12A | | |
| — Protection | | | |
| RJ11/45 protection | Yes | | |
| Input / Output protection against | Overload - Temperature - Short circuit | | |
| Overload in battery mode | 108% +/-5% < load ≤ 150% +/-5% exceeds 30s | | |
| Overload in utility mode | 108% +/-5% < load ≤ 150% +/-5% exceeds 30s | | |
| — Alarms | | | |
| Audible alarm | Battery backup, battery low, overload status, fault | | |
| LED alarm | Battery backup, battery low, overload status, fault | | |
| LCD display | Yes | | |
| — Bypass | | | |
| Type | Internal static (automatic) and manual bypass | | |
| — Standard | | | |
| Industry | CE-Certificate | | |
| — Environment | | | |
| Temperature / Altitude / Humidity | 0-40°C/less than 1500m/0-95% | | |
| Audible noise at 1m | < 50dB | | |
| — Interface | | | |
| Standard | RS232 / USB (software included) | | |
| Optional | SNMP / Relay card (dry contacts) | | |
| — Dimensions | | | |
| Weight (without batteries) | 5,5Kg | 10Kg | |
| WxDxH | 144x361x215mm | 191x428x337mm | |

Spirit XL

1-3 kVA (1/1)



Specifications

- On-line "double conversion" technology (VFI)
- DSP (Digital Signal Processor) technology
- High output power factor at 0.9
- Internal static bypass
- Very large input voltage range
- Hot-swappable batteries
- Battery backup time on LCD
- Operation on ECO mode
- Frequency converter mode 50/60Hz
- Convertible design for 19" Rack or Tower
- 2 output segments for load shedding
- RS232, USB, Smart slot, RJ45, EPO
- Cold start
- Software and USB cable included
- High efficiency up to 90%

Options:

- SNMP adapter
- Relay card (dry contacts)
- External maintenance bypass
- Additional / external battery packs
- 2 years warranty (electronics)

Applications



Convertible Rack/Tower



The Spirit XL is designed for IT applications like datacenter, server rooms, communication systems or security equipments.

The multifunction graphical LCD display is convertible for Rack and Tower use. It shows input, output, battery and user helpful parameters.

The UPS is equipped with an internal hot swappable battery compartment to ensure very easy and fast maintenance.

Bracket for rack mounting





| Spirit XL | Model | | | |
|------------------------------------|--|-------------------|-------------------|-----------------------------------|
| | Spirit XL 1kVA | Spirit XL 1,5kVA | Spirit XL 2kVA | Spirit XL 3kVA |
| Power (VA,Watt) | 1000VA/900W | 1500VA/1350W | 2000VA/1800W | 3000VA/2700W |
| — Input | | | | |
| Voltage range | 110-290VAC | | | |
| Frequency | 45-55Hz to 50Hz/55-65Hz to 60Hz (automatic) | | | |
| Power supply | Single phase | | | |
| Power factor | > 0,98 | | | |
| Power plug | IEC320 C13-10A | IEC320 C13-10A | IEC320 C13-10A | IEC320 C20-16A |
| Power cord | IEC320 C14-10A | IEC320 C14-10A | IEC320 C14-10A | IEC320 C19-16A |
| — Output | | | | |
| Voltage | 200/208/220/230/240VAC | | | |
| Power factor | 0,9 | | | |
| Voltage regulator | +/-2% | | | |
| Frequency (sector mode) | 46-54Hz to 50Hz/56-64Hz to 60Hz | | | |
| Frequency (battery mode) | 50/60Hz +/-0,02Hz | | | |
| Efficiency | AC mode : 90%, ECO mode : >95% | | | |
| Harmonic distortion THDI | ≤ 3% THD (linear load), ≤ 5% THD (no-linear load) | | | |
| Waveform | Pure sine wave | | | |
| Outlets (2 segments) | (IEC C13-10A)x6 | (IEC C13-10A)x6 | (IEC C13-10A)x6 | (IEC C13-10A)x6 / (IEC C19-16A)x1 |
| Overload capacity | 30s at 100% to 150% and 300ms >150% | | | |
| — Efficiency | | | | |
| ON LINE mode | 75-100% load > 88% | | | |
| Battery mode | 75-100% load > 92% | | | |
| ECO mode | 75-100% load > 95% | | | |
| — Battery (internal) | | | | |
| 12V batteries type | VRLA | | | |
| Voltage | 12V9Ah x2 | 12V9Ah x3 | 12V9Ah x4 | 12V9Ah x6 |
| Autonomy | remaining time on LCD | | | |
| Reload time at 90% | 5 hours | | | |
| Charge current | 1A | | | |
| Nominal voltage | 24Vdc | 36Vdc | 48Vdc | 72Vdc |
| Load mode | 3 progressive steps | | | |
| Protection | Overvoltage / overcurrent / undervoltage | | | |
| — Transfer time | | | | |
| Mains <---> Battery | 0 ms | | | |
| Mains <---> Bypass | < 4 ms | | | |
| — Indicator | | | | |
| LCD (with led) | Load / Battery / Input / Output / Working mode | | | |
| — Physical | | | | |
| Dimensions (WxDxH) mm | 440x430x86,5 (2U) | 440x430x86,5 (2U) | 440x572x86,5 (2U) | 440x696x86,5 (2U) |
| Weight (kg) | 13,7 | 16,2 | 22 | 29,2 |
| — Environment | | | | |
| Temperature | 0-40°C | | | |
| Humidity | 0-90% (non-condensing) | | | |
| Noise | <55dB at 1 m | | | |
| — Interface | | | | |
| RS232/USB | Free software (Windows, Linux, Mac) | | | |
| Intelligent slot | Optional SNMP (independent of the RS232 port) or relay/AS 400 card | | | |
| — Battery pack (additional) | | | | |
| | BP1000 | BP1500 | BP2000 | BP3000 |
| Dimensions (WxDxH) mm | 440x430x86,5 (2U) | 440x430x86,5 (2U) | 440x572x86,5 (2U) | 440x696x86,5 (2U) |
| Weight (kg) | 19,5 | 25 | 32,8 | 46,3 |

Spirit XL II

6/10 kVA (1/1)



Applications



Convertible Rack/Tower



Specifications

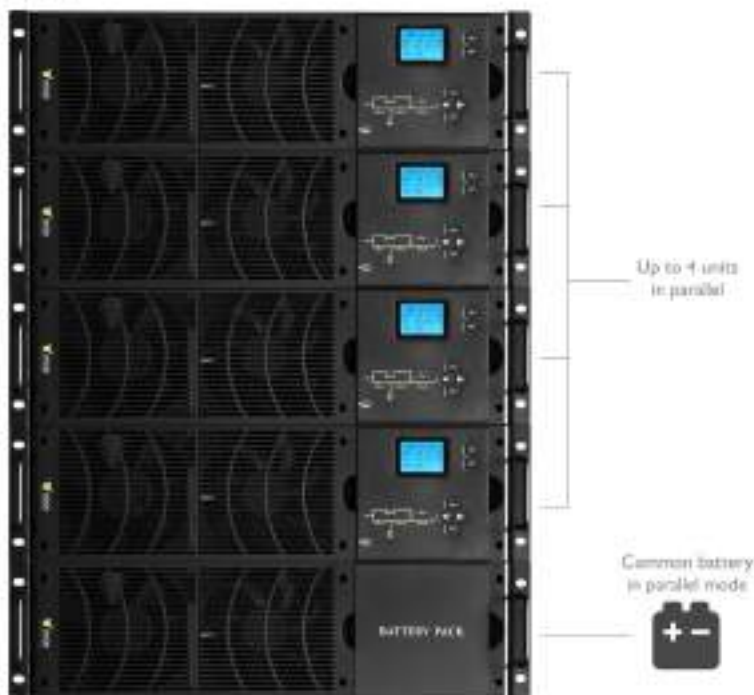
- On-line "double conversion" technology (VFI)
- DSP (Digital Signal Processor) technology
- Wide input voltage range (120-276V or 208-478V)
- Wide frequency range 40-70Hz +/- 0.5Hz
- Input power factor up to 0.99 and high output power factor 0.9
- Parallel connection up to 4 units (N+1)
- Rack/tower XL design with convertible display
- Output power factor correction (PFC)
- Battery DC cold start
- Diesel genset compatible
- ECO-Mode for energy saving
- Self testing at UPS startup
- Internal static and manual bypass
- Adjustable amount of batteries : 16/18/20pcs
- Common or separate battery in parallel mode
- Backup-time indication on the display
- Charging 1-10A
- Fixation for tower and rackmount included
- EPO contact (Emergency Power Off)
- Intelligent management through RS485 slot, USB
- Including monitoring software

Options:

- SNMP card
- External maintenance bypass
- Galvanic isolation transformer
- Spirit XL II version (3/1)
- 2 years warranty (electronics)

Parallel Redundancy Mode

Up to 4 Spirit XL II systems can be connected in parallel to get maximum power capacity. Only one battery is necessary with the parallel redundancy mode.





| Spirit XL II | Model | |
|--|--|----------------|
| | 6kVA | 10kVA |
| Power (kW) | 5.4 | 9 |
| — Input | | |
| Connection | L-N (single-phase), optional :3L-N 4 wires (three-phase) | |
| Nominal voltage | 220/230/240 VAC, optional 380/400/415 VAC | |
| Input voltage range | 120-276VAC (1/1), optional 208-478VAC (3/1) | |
| Frequency | 40-70Hz +/- 0.5Hz | |
| Power factor | > 0.99 | |
| THDi | ≤ 3 % at 100% non-linear load | |
| Bypass voltage range (ECO-mode) | Max. voltage +25% (+10%, +20% - option); Min. voltage -45% (-20%-30% - option); frequency range : +/-10% | |
| — Output | | |
| Output connection | 2x IEC-C13 | |
| Voltage | 220/230/240 VAC | |
| Type of wave | Pure sine wave | |
| THD | ≤ 2% linear load ; ≤ 5% non-linear load | |
| Frequency | 50/60Hz +/-0,1Hz | |
| Voltage range | +/- 1% | |
| Crest factor | 3:1 | |
| Efficiency at 75-100% load | >92% (AC mode) / >94% (battery mode) / > 97% (ECO mode) | |
| — Battery (external) | | |
| Voltage | 16/18/20 12V - only external batteries (modules) | |
| Charging current | 1-10A | |
| Parallel systems | Common or separate battery possible | |
| — Protection | | |
| Events | Overload, temperature, short circuit, battery discharge, voltage spikes | |
| Overload capability (normal mode) | Load ≤110% : 3min, ≤125% : 30sec, ≤150% : 1sec, >150 : shutdown of the UPS | |
| Overload capability (backup mode) | Load ≤110% : 30sec, ≤125% : 1sec, ≤150% : 200ms, >150 : shutdown of the UPS | |
| Overload capability (bypass) | Input fuse 40A | Input fuse 63A |
| — Indications | | |
| Acoustic signals | Interruption, battery discharge, overload, fault | |
| LED,LCD display | Grid, battery, bypass, working modes, battery discharge, overload, error | |
| LCD display | Voltage / frequency, load %, battery voltage, temperature, remaining backup time | |
| — Bypass | | |
| Type | Internal static and manual bypass / external maintenance bypass (option) | |
| — Certificates | | |
| EMC protection | CE, EN/IEC 62040-2, EN/IEC 62040-1-1 | |
| Protection class | IP20 (up to IP55 on option) | |
| — Interface | | |
| Standard | USB, dry contacts, EPO, RS485 1slot | |
| Options | SNMP / parallel card with centralized monitoring | |
| — Dimensions | | |
| UPS, WxDxH mm | 440x580x130 mm (3U) | |
| Weight of the UPS | 23kg | 25kg |
| — External battery modules | | |
| Battery | 20 pcs per 12V/9Ah | |
| Dimensions WxDxH and weight | 440x720x132mm (3U) / 67kg | |
| Connections input/output/battery modules | terminals | |

Spirit II

6/10 kVA (1/1)



Applications



Estimated Remaining Time (LCD)

| FIGURE | |
|---------|------|
| Battery | 8.9h |
| 120V | 8.9h |
| 90Vdc | 60% |

The LCD display shows an estimation of the remaining battery backup time.

Specifications

- On-line "double conversion" technology (VFI)
- DSP (Digital Signal Processor) technology
- Internal static and manual bypass breaker
- Input Power Factor up to 0.99
- Wide input voltage range
- Up to 4 units in parallel
- Battery (DC) cold start
- Common or separate battery in parallel mode
- Charging current 1-10A
- Adjustable battery voltage (16/18/20 batteries)
- ECO-Mode for energy saving
- Site wiring fault indication
- Self testing at UPS startup
- Intelligent management through RS485, USB, DB9

Options:

- SNMP adapter
- Relay card (dry contacts)
- Central monitoring card external maintenance bypass
- Additional / external battery packs
- Spirit II 6/10kVA version (3/1)
- 2 years warranty (electronics)

Parallel Redundancy Mode

Up to 4 Spirit II systems can be connected in parallel to get maximum power capacity. Only one battery is necessary with the parallel redundancy mode.

Additional battery pack open view



Common battery in parallel mode



Up to 4 units in parallel

Spirit II 6kVA



Spirit II 10kVA



| Spirit II | Model | |
|---|--|---------|
| | 6000VA | 10000VA |
| Power (Watt) | 5400 | 9000W |
| — Input | | |
| Nominal voltage | 220/230/240 VAC, optional 380/400/415 VAC | |
| Input voltage range | 120-276VAC (1/1), optional 208-478VAC (3/1) | |
| Frequency | 40-70Hz (auto sensing) | |
| Input power factor | ≥ 0.99 | |
| Bypass voltage range | - 45% / +15% | |
| Harmonic distortion | ≤ 5% at 100% non-linear load | |
| — Output | | |
| Voltage | 200/230VAC | |
| Waveform | Pure sine wave | |
| Harmonic distortion (THD) | < 2% at 100% linear load | |
| Frequency | +/- 1/2/4/5/10% of the rated voltage (optional) / 50Hz +/- 0,2% (battery mode) | |
| Voltage stabilization | +/-2% | |
| Crest factor | 3:1 | |
| Efficiency at 75-100% load | >92% (AC mode) / >95% (battery mode) / >97% (ECO mode) | |
| — Battery (internal) | | |
| Type | VRLA | |
| Voltage | 240VDC | |
| Standard backup time (internal battery) | 6-8min | 3-5min |
| Power of the internal charger | 1-10A adjustable | |
| — Protection | | |
| Input/Output protection against | Overload - Temperature - Short circuit | |
| Overload capacity AC Mode/Battery Mode | ≤ 110% load 3min/30sec, ≤ 125% load 30sec/3sec, ≤ 150% load 1sec / 200ms | |
| — Alarms | | |
| Audible alarm | Battery backup, battery low, overload status, fault status | |
| LED | Mains, inverter, bypass, fault, battery level | |
| LCD | Input and output voltage, load, battery voltage, error codes | |
| — Bypass | | |
| Type | Internal static (automatic) and manual bypass / External bypass optional | |
| — Environment | | |
| Temperature/Altitude/Humidity | 0-40°C / less than 1500m / 0-95% non-condensing | |
| Audible noise at 1m | < 50dB | |
| — Interface | | |
| Standard | USB / RS485 (software included) / DB9 (opto-coupler) | |
| Optional | SNMP card / Parallel card / Centralized monitoring card / Relay card | |
| — Dimensions | | |
| Weight (with internal batteries) | 70kg | 80kg |
| WxDxH | 250x590x660mm | |
| Standard | CE-certificate, EN/IEC 62040-2, EN/IEC 62040-1, GOST Russia | |

Premium VIS

10-30 kVA (3/3)



Applications



Price-Performance Ratio

The Premium VIS series is our best "price-performance ratio" 3/3 phase UPS. Based on our modular UPS technology, we are able to offer extremely small UPS 10-30kVA solutions. A combination of our modular based UPS with a special DC/DC converter, the Premium VIS UPS can work with a battery voltage of only 192 to 240Vdc (adjustable). It allows to reduce space, batteries and price.

Specifications

- On-line "double conversion" technology (VFI)
- Parallel redundancy On-line UPS (up to 4 units)
- Input Power Factor up to 0,99 (PFC technology)
- DSP (Digital Signal Processor) technology
- Common battery string for parallel units
- IGBT technology (rectifier and inverter)
- Internal static and manual bypass
- 16/18/20 12V batteries per string (adjustable)
- ECO-Mode for energy-saving
- Intelligent charging management
- Self-test during UPS startup
- Internal and external batteries
- Unbalanced load acceptable
- Wide input voltage range
- Battery cold start
- LCD-LED double display with audible and visible alarms
- RS485 and USB ports, dry contacts
- EPO (Emergency Power Off)
- Options:
 - SNMP card
 - Relay card
 - Remote LCD panel
 - External maintenance bypass
 - 1 year warranty (electronics)

Parallel Redundancy Mode

Up to 4 Premium VIS systems can be connected in parallel to get maximum power capacity. Only one battery is necessary with the parallel redundancy mode.





| Premium VIS | Model | | | |
|-------------------------------|---|-------------|-------------|-------------|
| | 10kVA | 15kVA | 20kVA | 30kVA |
| Power (kW) | 9 | 13,5 | 18 | 27 |
| — Input | | | | |
| Nominal voltage | 380/400/415VAC (3ph+N+PE) | | | |
| Maximum voltage | 208-478VAC | | | |
| Frequency | 50/60Hz (45-66Hz) | | | |
| Input power factor | 0,99 | | | |
| Harmonic distortion (THD) | <3% (at 100% non-linear load) | | | |
| Bypass voltage range | Min. voltage : -45%, Max. voltage : +25% (220V), +20% (230V), +15% (240V) | | | |
| Bypass frequency range | Frequency protection range : +/- 10% | | | |
| — Output | | | | |
| Voltage and waveform | 380/400/415V +/- 1% (pure sine wave) | | | |
| Harmonic distortion (THD) | <2% linear load, <5% non linear load | | | |
| Frequency | 50/60Hz (+/-0,1Hz in battery mode, +/-1% in line mode and +/-2/4/5/10% optional) | | | |
| Crest factor | 3:1 | | | |
| Efficiency at 75-100% load | 93% (AC mode) / 94% (battery mode) / 97% (ECO mode) | | | |
| Bypass | Internal static (automatic) and manual bypass / External bypass optional | | | |
| Transfer time | Mains to battery : 0sec, mains to bypass : 0sec | | | |
| — Battery (internal) | | | | |
| Voltage | Adjustable (192/216/240VDC) | | | |
| Internal battery | 20x12V9Ah | 2x20x12V9Ah | 2x20x12V9Ah | 3x20x12V9Ah |
| Maximum charging current | 1,35A | 2,7A | 2,7A | 10A |
| — Protection | | | | |
| Input / output | Overload, overheating, short circuit, battery low, noise and spike suppression | | | |
| Overload | ≤110% : 60min, ≤125% : 10min, ≤150% : 1min, >150 : turn to bypass mode | | | |
| — Alarms - information | | | | |
| Audible alarm | Line failure, battery low, bypass-overload status, fault status | | | |
| LED | Line-backup-ECO mode-bypass-battery low/bad/disconnected, overload, fault | | | |
| LCD | Voltage/frequency, load %, battery voltage/runtime, inner temperature | | | |
| — Standard | | | | |
| Safety | IEC/EN62040-1, IEC/EN60950-1 | | | |
| EMC | IEC/EN62040-2, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-8 | | | |
| Protection class | IP20 | | | |
| — Environment | | | | |
| Temperature / humidity | 0-40°C/-25-55°C/0-95% (non condensing) | | | |
| Noise | < 55dB | | < 58dB | |
| — Interface | | | | |
| Standard | USB, dry contacts, intelligent slot, parallel port RS485, RS232 | | | |
| Optional | SNMP card, relay card | | | |
| — Dimensions | | | | |
| Weight (without batteries) | 42kg | 45kg | 67kg | |
| WxDxH mm | 250x828x868 | | | |

Premium 33+

10-300kVA (3/3)



ON-LINE

Applications



Different Size and Power



Specifications

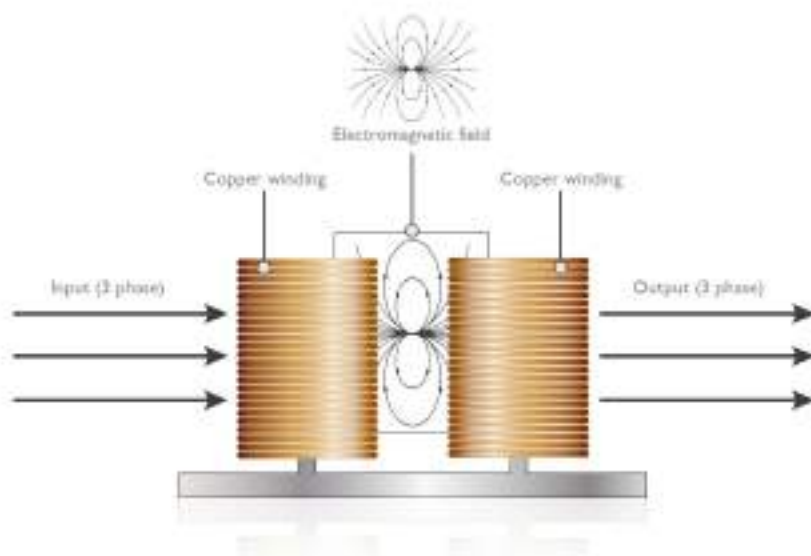
- On-line "double conversion" technology (VFI)
- Galvanic isolation transformer
- LCD-LED display
- IGBT technology (inverter)
- Optional battery runtime
- Inductive load acceptable
- Wide input voltage range
- Parallel redundancy (optional)
- Internal static and manual bypass
- Self testing at UPS startup
- 128 events alarm memory
- Intelligent management via RS232
- EPO (Emergency Power Off)
- Relay card (dry contacts)
- Software and USB cable included

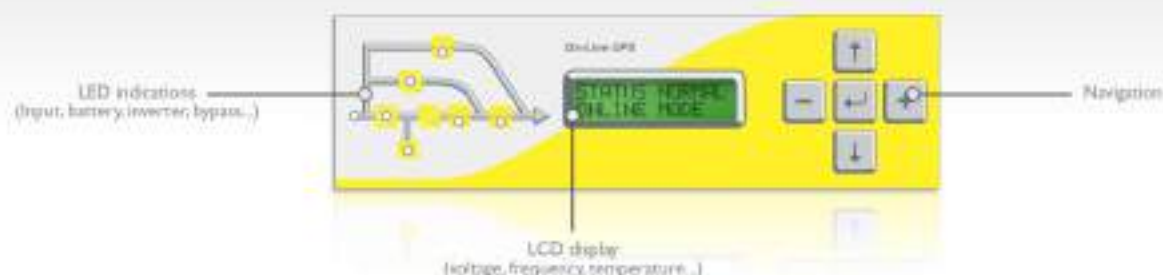
Options:

- SNMP/AS400 card
- External maintenance bypass
- 1 year warranty (electronics)

Galvanic Isolation Transformer +

This high-quality online UPS of Vision is provided with a galvanic isolation transformer, which means that the electric circuits before and after the UPS are not connected physically, but via an electromagnetic field. This increases the reliability of the protection essentially. Spikes and disturbances can not pass the galvanic isolation transformer.





| Premium 33 | Model | | | | | | | | | | | | | | |
|---------------------------------|--|-------|-------|---------|--------------|-------|---------|--------------|--------|---------|---------------|----------|---------------|--|---------------|
| | PRP10 | PRP15 | PRP20 | PRP30 | PRP40 | PRP60 | PRP80 | PRP100 | PRP120 | PRP160 | PRP200 | PRP250 | PRP300 | | |
| Power (kVA) | 10 | 15 | 20 | 30 | 40 | 60 | 80 | 100 | 120 | 160 | 200 | 250 | 300 | | |
| — Input | | | | | | | | | | | | | | | |
| Voltage | 380/400 VAC 3 phase +N, +/- 15% | | | | | | | | | | | | | | |
| Internal bypass | 380 to 400 V 3 phase, +/- 12% | | | | | | | | | | | | | | |
| Input frequency | 50Hz (60Hz on request), +/-5% | | | | | | | | | | | | | | |
| — Output | | | | | | | | | | | | | | | |
| Power (kW) | 8 | 12 | 16 | 24 | 32 | 48 | 64 | 80 | 96 | 128 | 160 | 200 | 240 | | |
| Power factor | 0,8 | | | | | | | | | | | | | | |
| Voltage | 380/400 VAC 3 phase +N | | | | | | | | | | | | | | |
| Voltage stability | balanced load: +/- 1%, unbalanced load: +/-2%, step load: +/-5% | | | | | | | | | | | | | | |
| Restoration time (voltage) | 25ms maximum | | | | | | | | | | | | | | |
| Frequency | 50Hz (60Hz optional) | | | | | | | | | | | | | | |
| Frequency tolerance | line synchronized: +/-2%, free running: +/-0,2% | | | | | | | | | | | | | | |
| Efficiency at 100% load | 90-91% | | | | | | | | | 90-93% | | | | | |
| Crest factor | 3:1 | | | | | | | | | | | | | | |
| Overload protection | 10min: 100% to 125%, 1min: 125% to 150%, bypass : more than 150% | | | | | | | | | | | | | | |
| Short circuit protected | electrical | | | | | | | | | | | | | | |
| Total harmonic distortion (THD) | linear load: <3%, non linear load: <5% | | | | | | | | | | | | | | |
| — Batteries (external) | | | | | | | | | | | | | | | |
| Type | AGM/Gel - maintenance free | | | | | | | | | | | | | | |
| Number of batteries | 30 x 12V | | | | | | | | | | | 32 x 12V | | | |
| Ambient temperature °C | 25°C | | | | | | | | | | | | | | |
| Battery protection | circuit breaker | | | | | | | | | | | | | | |
| Battery test | automatic selectable (1-3 days) | | | | | | | | | | | | | | |
| — General | | | | | | | | | | | | | | | |
| Regulations | EN62040-2 | | | | | | | | | | | | | | |
| Serial communication | dry contacts & RS232 | | | | | | | | | | | | | | |
| Software | UPS management software (clients multi) | | | | | | | | | | | | | | |
| Temperature range | 0-40°C | | | | | | | | | | | | | | |
| Ventilation | forced air cooling | | | | | | | | | | | | | | |
| Relative humidity | < 90% (non condensed) | | | | | | | | | | | | | | |
| Protection degree | IP20 | | | | | | | | | | | | | | |
| Altitude | < 1000m. above sea level | | | | | | | | | | | | | | |
| Acoustic noise | < 56dBA | | | < 60dBA | | | < 65dBA | | | < 70dBA | | | | | |
| Weight without batteries (kg) | 225 | 255 | 265 | 295 | 410 | 460 | 590 | 795 | 895 | 1125 | 1155 | 1595 | 1775 | | |
| Dimensions (mm) HxWxD | 1155x505x655 | | | | 1395x375x820 | | | 1455x720x825 | | | 1655x1110x810 | | 1735x1195x870 | | 1885x1565x925 |
| — Options | | | | | | | | | | | | | | | |
| Input/output voltage | 208/220VAC 3 phase | | | | | | | | | | | | | | |
| Transformer | galvanic isolation transformer at the input | | | | | | | | | | | | | | |
| Input harmonic filter | 10% with 12 pulse rectifier, 5% with 18 pulse rectifier | | | | | | | | | | | | | | |
| IPF | up to 0,97 with 18 pulse rectifier | | | | | | | | | | | | | | |
| Communication | SNMP, MODBUS, RS485 | | | | | | | | | | | | | | |
| Parallel operation | up to 4 units | | | | | | | | | | | | | | |

ON-LINE

VisionMod STR 19"

10-80 kVA (3/3)



Specifications

- On-line "double conversion" technology (VFI)
- Input power factor up to 0.99
- Output power factor 0.9 (1 optional)
- DSP (Digital Signal Processor) technology
- Internal static and manual bypass
- Wide input voltage range (208-478VAC)
- Parallel connection up to 4 units (80kVA)
- Automatic load sharing for all units in parallel
- Adjustable 6A charger per module
- Genset compatibility
- Various monitoring systems
- For long backup time
- For 19" racks and cabinets
- Adjustable battery voltage from 384-480VDC (32 to 40 batteries 12V DC)
- Common or separate batteries

- RS232/RS485
- EPO (Emergency Power Off)

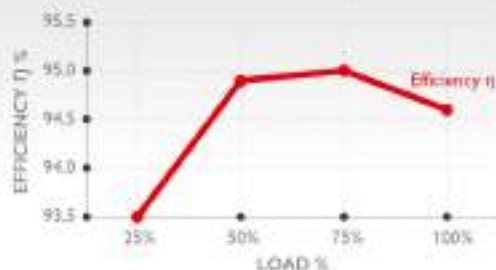
Options:

- SNMP card
 - External maintenance bypass
 - Relay / AS400 card
 - Modbus interface
- 1 year warranty (electronics)

Applications



Efficiency



Modules for 19" Racks & Cabinets

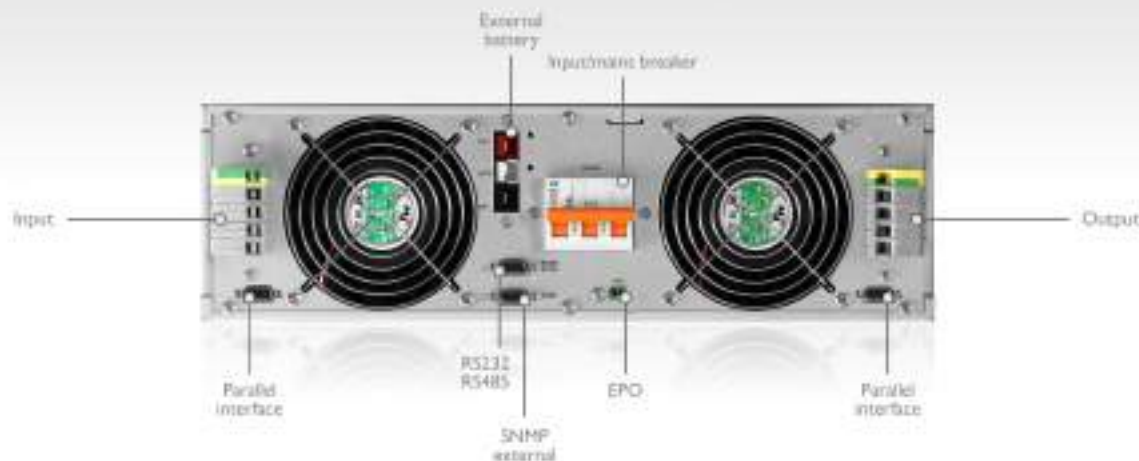
Each power module is an independent UPS with rectifier, inverter and bypass. You can place it in a standard 19" cabinet.



Up to 4 units in parallel



Common battery in parallel mode (hot swap)



| Vision Mod STR | | Model |
|-------------------------------------|--|--|
| Nominal capacity / Power per module | 10 kVA/9kW and 20kVA/18kW (optional 20kVA/20kW) | |
| — Input | | |
| Rated voltage | 380/400/415VAC | |
| Voltage range | 208-478VAC | |
| Frequency | 40-70Hz | |
| Input power factor | > 0.99 | |
| Current THDI | < 3% (at 100% non-linear load) | |
| — Output | | |
| Voltage | 380/400/415VAC ± 2% with pure sine wave | |
| Frequency | 50/60Hz ± 0,2% | |
| Harmonic distortion | < 2% (linear load) / <5% (non-linear load) | |
| Crest factor | 3:1 | |
| Efficiency at 75-100% load | ECO mode > 98% / AC mode up to 95% | |
| — Battery (external) | | |
| Type | VRLA / AGM / Gel | |
| Voltage | 384-480Vdc (32-40 batteries) | |
| Maximum charging current | 6A per module (can be set according to battery capacity installed) | |
| Additional backup time | Battery module or external battery cabinet for long backup | |
| — Protection | | |
| Input/Output | Overload, Overheating, Short circuit, Battery low, Noise and spike suppression | |
| Overload AC-Mode | ≤ 110% - 60min / ≤ 125% - 10min / ≤ 150% - 1min | |
| Overload battery mode | ≤ 110% - 30sec / ≤ 125% - 1sec / ≤ 150% - 200msec | |
| Overload bypass mode | Input breaker 40A | |
| — Alarms - indications | | |
| Audible alarm | Line failure, Battery low, Bypass - overload status, Fault status | |
| LED | Line - Backup - ECO Mode, Bypass, Battery low/Bad/Disconnect, Overload, Fault | |
| LCD display | Grid, battery, bypass, working modes, battery discharge, overload, error | |
| — Bypass | | |
| Type | Internal static (automatic) and manual bypass / External bypass optional | |
| Bypass voltage range | Max.voltage: +15%(optional +5/10/25%)Min.voltage: -45%(optional -20/30%) Frequency protection range: ± 10% | |
| — Standards | | |
| Certificates | CE, EN62040-1-1 (ESD), EN62040-2 (EMI) | |
| Protection class | IP20 | |
| — Environment | | |
| Temperature | Working temperature : 0-40°C / Storage temperature : -25 - 55°C | |
| Humidity / Altitude | 0-95% non condensing / < 1500m | |
| Audible noise at 1m | < 60dB / 1m according to EN62040-2 | |
| — Interface | | |
| Power module | RS232 / RS485 / EPO | |
| Optional | SNMP-Adapter, relay / AS400 card, modbus interface | |
| — Dimensions of the module | | |
| Dimensions WxDxH | Power module 443x580x131 mm (3U) | Battery module 443x580x131 mm (3U) |
| Weight | 31kg | Empty : 15kg, 3 shelves hot swap 23kg/shelve |

Marathon 3/3

20kVA/18kW-80kVA/72kW (3/3)



Applications



Backup Table Time

| | Load in Watts | | | | |
|--------|---------------|--------|-------|-------|-------|
| | 45W | 6KW | 8KW | 12KW | 16KW |
| BP3626 | 120min | 60min | 45min | 25min | 20min |
| BP3645 | 180min | 120min | 90min | 45min | 30min |

Backup time in minutes



Specifications

- On-line "double conversion" technology (VFI)
- Input power factor up to 0.99
- Output power factor 0.9 (1 optional)
- DSP (Digital Signal Processor) technology
- Internal static and manual bypass
- Wide input voltage range (208-478VAC)
- Parallel connection up to 4 units (80kVA)
- Automatic load sharing for all units in parallel
- Adjustable 6A charger per module
- Genset compatibility
- Various monitoring systems
- For long backup time (45min/100%, 100min/50%)
- Adjustable battery voltage from 384-480VDC (32 to 40 batteries 12V DC)
- Common or separate batteries
- RS232/RS485
- EPO (Emergency Power Off)
- Options:
 - SNMP card
 - External maintenance bypass
 - Relay / AS400 card
 - Modbus interface
- 1 year warranty (electronics)

Power module 20kVA/18kW (up to 4 units in parallel)



Open side view with available space for batteries



Open front view





| Marathon 3/3 | |
|---------------------------------------|---|
| Nominal capacity (kVA) / Power (Watt) | 20kVA/18kW |
| — Input | |
| Rated voltage | 380/400/415VAC |
| Voltage range | 208-478VAC |
| Frequency | 40-70Hz |
| Input power factor | > 0.99 |
| Current THDI | 2% (at 100% non-linear load) |
| — Output | |
| Voltage | 380/400/415VAC ± 2% with pure sine wave |
| Frequency | 50/60Hz ± 0,2% |
| Harmonic distortion | < 2% (linear load) / <5% (non-linear load) |
| Crest factor | 3:1 |
| Efficiency | ECO mode > 98% / Normal mode up to 95% |
| — Battery (Internal) | |
| Type | VRLA |
| Voltage | Battery quantity : 384-480V (32-40 batteries) |
| Maximum charging current | 6A per module (can be set according to battery capacity installed) |
| Additional backup time | Battery module or external battery cabinet for long backup |
| — Protection | |
| Input/Output | Overload, Overheating, Short circuit, Battery low, Noise and spike suppression |
| Overload AC-Mode | ≤ 110% - 60min / ≤ 125% - 10min / ≤ 150% - 1min |
| Overload battery mode | ≤ 110% - 30sec / ≤ 125% - 1sec / ≤ 150% - 200msec |
| Overload bypass mode | Input breaker 40A |
| — Alarms - indications | |
| Audible alarm | Line failure, Battery low, Bypass - overload status, Fault status |
| LED | Line - Backup - ECO Mode, Bypass, Battery low/Bad/Disconnect, Overload, Fault |
| LCD | Voltage / Frequency, Load %, Battery voltage, Temperature |
| — Bypass | |
| Type | Internal static (automatic) and manual bypass / External bypass optional |
| Bypass voltage range | Max.voltage: +25%(optional +10/15/20%)Min.voltage: -45%(optional -20/30%) Frequency protection range: ± 10% |
| — Standards | |
| Certificates | CE, EN62040-1-1 (ESD), EN62040-2 (EMI) |
| Protection class | IP20 |
| — Environment | |
| Temperature | Working temperature : 0-40°C / Storage temperature : -25 - 55°C |
| Humidity / Altitude | 0-95% non condensing / < 1500m |
| Audible noise at 1m | < 55dB / 1m according to EN62040-2 |
| — Interface | |
| Power module | RS232 / RS485 / EPO |
| Optional | SNMP-Adapter, relay / AS400 card, modbus interface |
| — Dimensions | |
| Dimensions WxDxH | Power module 443x580x131 mm (3U) Cabinet with module (without batteries) 600x780x1200 mm |
| Weight | Power module 31kg Cabinet with module (without batteries) 169kg |

VisionMod Modular Series

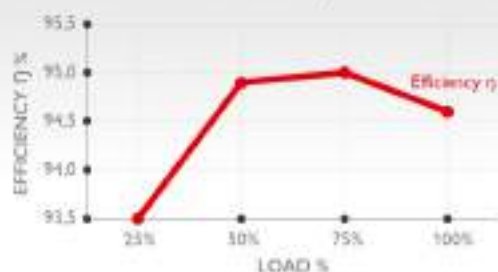
6-50kVA (1/1)(3/1) & 20-800 kVA (3/3)



Applications



Efficiency



Specifications

- On-line "double conversion" technology (VFI)
- Input power factor up to 0.99
- Output power factor 0.9 (1 optional)
- DSP (Digital Signal Processor) technology
- Internal static and manual bypass in each module (no centralized bypass required)
- Hot swappable power and battery modules
- Wide input voltage range (208-478VAC)(3/3)
- Adjustable battery voltage (384-480VDC)(3/3)
- Only one battery string for N+1 application
- 6A charging current per module
- Adjustable charging current
- Automatic load sharing
- Genset compatibility
- Big touchscreen LCD display
- Various monitoring systems
- Additional Bypass input
- High overload capacity & low noise
- RS232/RS485 Interface
- Relay card (dry contacts)
- EPO (Emergency Power Off)
- Options:
 - SNMP card
 - 1 year warranty (electronics)

Graphical LCD/LED display



Hot swappable module



Battery module (hot swap)



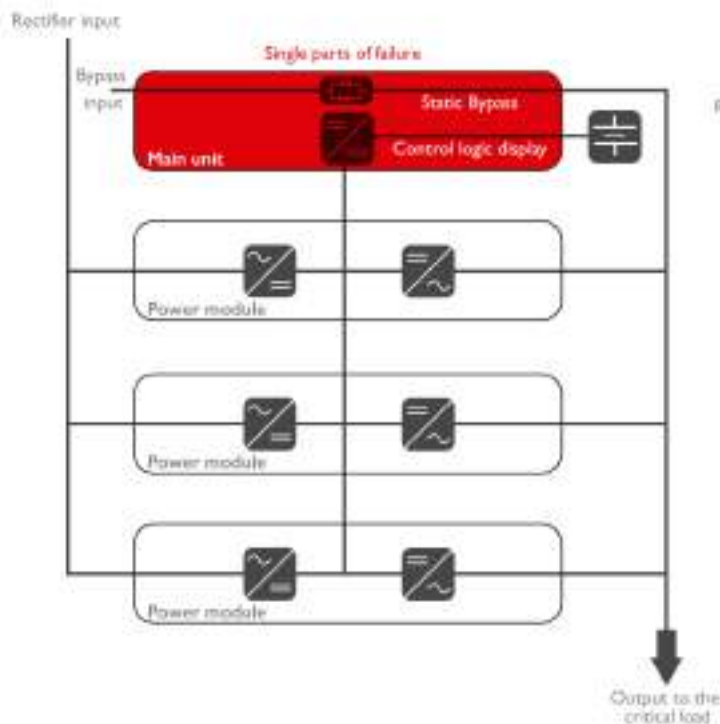
VisionMod Modular Series

Decentralized Modular Technology

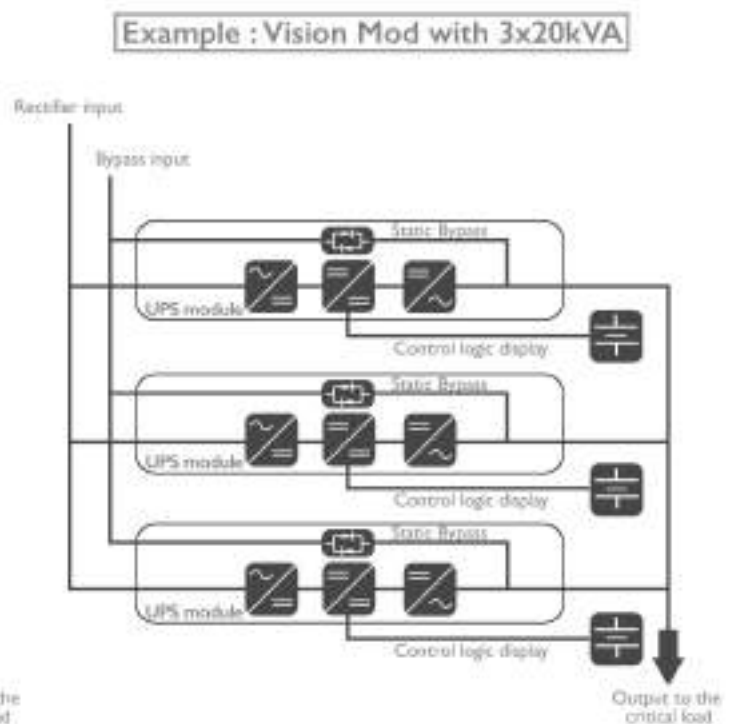
Vision modular UPS with separated components also called decentralized technology is the only possibility to work without the risk of a "single point of failure". Each UPS module has all the electronic-rectifier, inverter, static bypass switch, back-feed protection, battery fuse and control logic LCD display-to garranty autonomous operation.

Centralized UPS with common components

Decentralized UPS with separated components



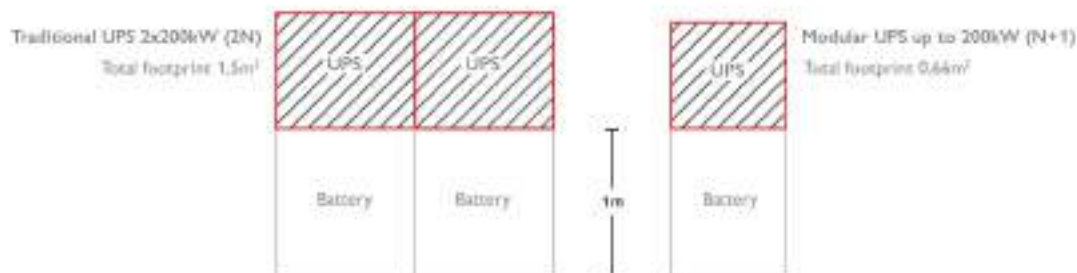
Single parts of failure, one single static bypass and/or control logic can result in a total system blackout



No single parts of failure. All components/parts are multiplied by the number X of used power modules

Reduce installation and maintenance costs

- The modular UPS reduces space requirements (in our example, 55% of space is saved)



- The maintenance and parts costs are easy to calculate and extremely transparent: only one module !



| Vision Mod | Model | |
|--|--|---|
| | 1/1 - 3/1 phase | 3/3 phase |
| Nominal capacity / Power per module | 6kVA/4,8kW - 10kVA/8kW | 20kVA/18kW (optional 20kVA/20kW) |
| — Input | | |
| Rated voltage | 380/400VAC or 220/230VAC | 380/400/415VAC |
| Voltage range | 208-478VAC (3/1) or 120-276VAC (1/1) | 208-478VAC |
| Frequency | 40-70Hz | |
| Input power factor | > 0.99 | |
| Current THDI | < 5% (at 100% non-linear load) | < 3% (at 100% non-linear load) |
| — Output | | |
| Voltage | 220/230VAC ± 2% with pure sine wave | 380/400/415VAC ± 2% with pure sine wave |
| Frequency | 50/60Hz ± 0,2% | |
| Harmonic distortion | < 2% (linear load) / < 5% (non-linear load) | |
| Crest factor | 3:1 | |
| Efficiency | ECO mode > 98% / Normal mode up to 95% | |
| — Battery | | |
| Type | VRLA | |
| Voltage | 142-240V (16-20 batteries 12VDC) | 384-480V (32-40 batteries 12VDC) |
| Maximum charging current | 6A per module (can be set according to battery capacity installed) | |
| Additional backup time | Internal batteries for short backup time or external battery cabinet for long backup | |
| — Protection | | |
| Input/Output | Overload, Overheating, Short circuit, Battery low, Noise and spike suppression | |
| Overload AC-Mode | ≤ 110% - 60min / ≤ 125% - 10min / ≤ 150% - 1min | |
| Overload battery mode | ≤ 110% - 30sec / ≤ 125% - 1sec / ≤ 150% - 200msec | |
| Overload bypass mode | Input breaker 40A(6kVA) & 60A(10kVA) | Input breaker 40A |
| — Alarms - indications | | |
| Audible alarm | Line failure, Battery low, Bypass - overload status, Fault status | |
| LED | Line - Backup - ECO Mode, Bypass, Battery low/Bad/Disconnect, Overload, Fault | |
| LCD | Big touchscreen display 5" front door (LCD on each power module) | |
| — Bypass | | |
| Type | Internal static (automatic) and manual bypass / External bypass optional | |
| Bypass voltage range | Max.voltage: +15%(optional +5/10/25%)Min.voltage: -45%(optional -20/30%) Frequency protection range: ± 10% | |
| — Standards | | |
| Certificates | CE, EN62040-1-1 (ESD), EN62040-2 (EMI) | |
| Protection class | IP20 | |
| — Environment | | |
| Temperature | Working temperature : 0-40°C / Storage-temperature : -25 - 55°C | |
| Humidity / Altitude | 0-95% non condensing / < 1500m | |
| Audible noise at 1m | < 60dB / 1m according to EN62040-2 | |
| — Interface | | |
| In the cabinet | RS232 / RS485 / 2 free slots / dry contacts / EPO | |
| Optional | SNMP-Adapter | |
| — Dimensions of internal module | | |
| Dimensions WxDxH (power & batteries) | 443x580x131 mm (3U) | |
| Weight | Power: 31kg, battery : 2x70kg | |
| — Dimensions & max. power 1/1,3/1 | | |
| Dimensions WxDxH of the cabinet | for max. 5 modules (30kVA) 600x840x1400mm | for max. 10 modules (50kVA) 600x840x2000mm |
| Weight of the cabinet | 150kg | 213kg |
| — Dimensions & max. power 3/3 | | |
| Dimensions WxDxH of the cabinet | for max. 5 modules (100kVA) 600x840x1400mm | for max. 10 modules (200kVA) 600x840x2000mm |
| Weight of the cabinet | 170kg | 230kg |

Premium DSP0.9 Hybrid

10-400 kVA (3/3) 10-30kVA (3/1)



ECO friendly

HYBRID

Specifications

- Hybrid function (optional/scalable)
- On-line "double conversion" technology (VFI)
- High efficiency > 94%
- Cold start function
- Output power factor 0,9
- Output short circuit and overload protection
- Emergency power off (EPO)
- Big graphic LCD screen
- Automatic battery test
- High capacity charging current in the battery
- Temperature compensated battery charging
- 512 events memory (more than 46000 alarms)
- 2 serial ports RS232 and dry contacts
- Functionality remote control via Teamviewer
- Split bypass input
- Internal batteries up to 80kVA
- Very small footprint
- Up to 8 units in parallel

Options:

- SNMP card, MODBUS adapters
- 2 years warranty (electronics)

Applications



Working Priorities in hybrid mode



Premium DSP0.9 Hybrid

The Premium DSP0.9 Hybrid is a multifunctional UPS. It can work as a standard double conversion on-line UPS by using the grid or generator as main power source.

STEP 1: choose UPS power according to the load.

At any time you can add solar panels and our special designed charge controller to the Premium DSP0.9 Hybrid UPS to work in combination with solar+grid.

This goes to STEP 2 :

→ Add solar power according to the energy you want to save.

The solar power installation is scalable in power and time.

Example : you have a 40kVA Premium DSP0.9 Hybrid and you want to add 5/10kW solar power (panels+hybrid controller).

At any time you can re-invest the money you have saved with the initial 5/10kW solar power installation to increase step by step with additional 5/10kW solar power.

With this solution, you become your own energy producer with a possible 100% return of investment.

Premium DSP0.9 Hybrid

One UPS, three choices. The possibilities :

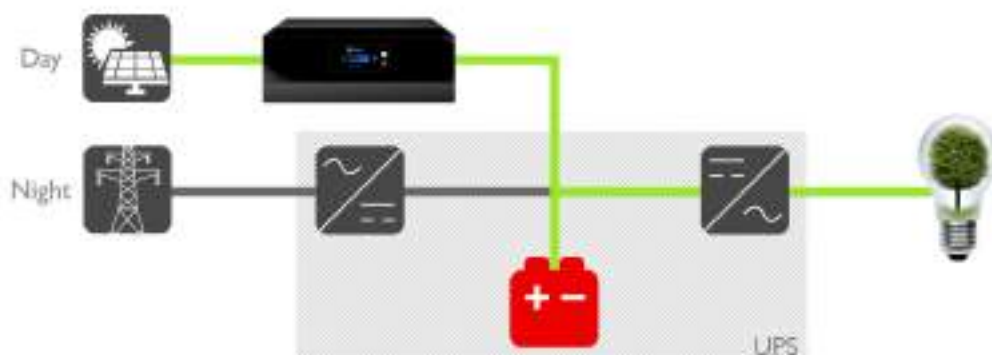
Traditional UPS (DSP0.9)



Energy :
100%
Grid or **batteries**

The connected load is powered by our Premium DSP0.9, online double conversion UPS with the latest technology. The energy comes from the grid or from the batteries in case of a power blackout.

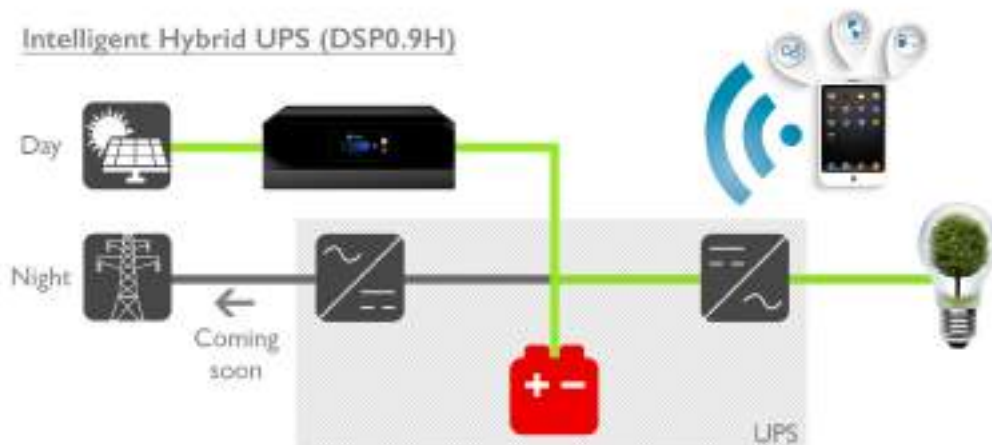
Hybrid UPS (DSP0.9H)



Energy :
100%
Priority on
solar energy
+
Grid or **batteries**

The connected load is powered by our Premium DSP0.9H, online double conversion UPS with the latest technology. The priority energy comes from the solar panels installation. Our special charge regulator is connected to the DC part of the hybrid UPS. The grid is connected in parallel and only supplies the missing energy if the solar energy is not available (at night) or not strong enough (according weather and load conditions).

Intelligent Hybrid UPS (DSP0.9H)

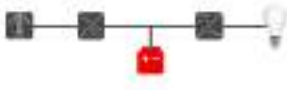
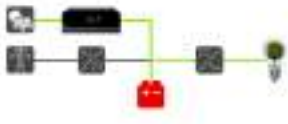
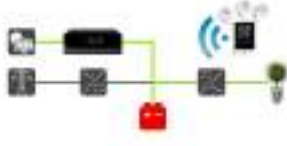


Energy :
100%
Priority on
solar energy
+
Grid and/or **batteries**

Additionally to the hybrid function, the intelligent energy flow management gives you "real time" status information. You simply need a device connected to internet to setup and monitor the different energy flows. According weather prognostics, customer profile and energy prices, the system will choose the most economic solution.

Premium DSP0.9 Hybrid

The advantages

| | Traditional UPS | Hybrid UPS | Intelligent Hybrid UPS |
|--|---|--|---|
| |  |  |  |
| Return of investment | - | 4-8 years* | 3-6 years* |
| Backup time | According batteries | According batteries & solar | According batteries & solar |
| 100% stabilized output power | ● | ● | ● |
| Full protection against power failure-blackout | ● | ● | ● |
| Solar energy storage | - | ● | ● |
| Simultaneous power by solar energy, grid & battery (genset optional) | - | ● | ● |
| Intelligent management | - | - | ● |

Return of investment : The first working priority is solar energy (free of charge) to return your investment cost.

*depending the sizes of solar installation, energy prices and geographic situation.

Backup time :

-Traditional UPS : according batteries

- Hybrid UPS : if the solar power is strong enough to supply your load, the batteries are not used.

100% stabilized output power : As a conventional on-line UPS, it always offers full protection against any kind of power problems without any internal switching.

Full protected against power failure-blackout : The connected batteries protect you against power failure-blackout.

Solar energy storage : All unused energy is stored in batteries (fed in to the grid is in preparation).

Simultaneous power by solar energy, grid & battery : Our hybrid technology automatically choose the most ecologic and economic solution to power your load.

Intelligent management : It offers real time status information. The different energy flows can be setup according weather datas, energy prices and/or customer profiles.



| Premium DSP0.9 Hybrid | Model | | | | | | | | | | | | | | |
|--------------------------------------|--|--------|--------|--------|--------|--------------|--------|----------|---------|---------|------------------------------|---------|---------|---------|--|
| | DSP10H | DSP15H | DSP20H | DSP30H | DSP40H | DSP60H | DSP80H | DSP100H | DSP120H | DSP160H | DSP200H | DSP250H | DSP300H | DSP400H | |
| Power (kVA) | 10 | 15 | 20 | 30 | 40 | 60 | 80 | 100 | 120 | 160 | 200 | 250 | 300 | 400 | |
| — Input | | | | | | | | | | | | | | | |
| Voltage | 380/400/415 VAC 3phase +N, +/-20% (415VAC +15% -25%) | | | | | | | | | | | | | | |
| Frequency | 50Hz / 60Hz selectable, +/- 10Hz | | | | | | | | | | | | | | |
| Power factor | > 0,98 | | | | | | | | | | | | | | |
| Harmonic current distortion | < 5% (< 3% optional) | | | | | | | | | | | | | | |
| Protection | breaker, voltage and frequency tolerance, input power / input power factor | | | | | | | | | | | | | | |
| Bypass voltage | 380/400/415 VAC 3phase +N, +/-10% | | | | | | | | | | | | | | |
| Bypass protection | voltage and frequency out of range, short circuit | | | | | | | | | | | | | | |
| — Output | | | | | | | | | | | | | | | |
| Power factor | 0,9 | | | | | | | | | | | | | | |
| Power (kW) | 9 | 13,5 | 18 | 27 | 36 | 54 | 72 | 90 | 108 | 144 | 180 | 225 | 270 | 360 | |
| Voltage | 380/400/415 VAC 3phase +N, +/- 1% (220/230/240VAC possible for 10-30kVA) | | | | | | | | | | | | | | |
| Frequency | 50Hz or 60Hz adjustable | | | | | | | | | | | | | | |
| Tolerance | line synchronized +/-2%, battery mode +/- 0,1% adjustable | | | | | | | | | | | | | | |
| Efficiency | up to 94% | | | | | | | | | | | | | | |
| Crest factor | 3:1 | | | | | | | | | | | | | | |
| Overload protection | 100-125% 8min, 125-150% 60sec | | | | | | | | | | | | | | |
| Additional protection | short circuit, voltage and current range | | | | | | | | | | | | | | |
| THD (at 100% linear load) | < 3% | | | | | | | | | | | | | | |
| — Battery | | | | | | | | | | | | | | | |
| Type | VRLA AGM / GEL or other types | | | | | | | | | | | | | | |
| Nominal voltage | +/-360Vdc (720Vdc) | | | | | | | | | | | | | | |
| Float or end of discharge DC voltage | +/- 400Vdc, +/-300Vdc | | | | | | | | | | | | | | |
| Battery | internal | | | | | | | external | | | | | | | |
| Protection | overcharging, battery fuses, T° compensation (in option) | | | | | | | | | | | | | | |
| Automatic test | daily, weekly (adjustable) | | | | | | | | | | | | | | |
| — General | | | | | | | | | | | | | | | |
| Standard | EMC/ LVD/EMI - EN62040-1/2, EN60950 | | | | | | | | | | | | | | |
| User interface | multi language graphical LCD | | | | | | | | | | | | | | |
| LCD information | phase to phase voltage and phase to phase to neutral voltage/current, power, frequency, crest factor | | | | | | | | | | | | | | |
| Advanced | auto diagnostics, different maintenance alarms and calibration through RS232 | | | | | | | | | | | | | | |
| Communication | 2x RS232 ports, 4 dry contact (in option 8 dry contacts) | | | | | | | | | | | | | | |
| Input | generator contact and emergency power off | | | | | | | | | | | | | | |
| Genset kit | user programmable | | | | | | | | | | | | | | |
| Software | management software | | | | | | | | | | | | | | |
| Alarm | 200 events (time and date) / in option 500 events | | | | | | | | | | | | | | |
| Protection | over-temperature, over current, over-temperature alarm | | | | | | | | | | | | | | |
| Temperature range | 0°C - 40°C | | | | | | | | | | | | | | |
| Protection degree | IP20 (IP54 optional) | | | | | | | | | | | | | | |
| Humidity / Altitude | 90% max without condensation / < 1000m | | | | | | | | | | | | | | |
| Acoustic noise | ≤ 56dB | | | ≤ 61dB | | | ≤ 64dB | | | ≤ 67dB | | | ≤ 72dB | | |
| Weight (kg) | 86 | 92 | 98 | 175 | 182 | 196 | 218 | 259 | 480 | 560 | 650 | 770 | | | |
| Dimensions (mm) HxDxW | 1037x398x812 | | | | | 1437x513x852 | | | | | 1797x882x763 1797x1246x763 | | | | |
| — Hybrid controller | | | | | | | | | | | | | | | |
| Power | 5/10 kW (up to 10 units in parallel) | | | | | | | | | | | | | | |
| MPPT Input | 270-640 Vdc | | | | | | | | | | | | | | |
| Input min/max Voc | 200 Vdc / 750Vdc | | | | | | | | | | | | | | |
| Efficiency | ≥ 97% | | | | | | | | | | | | | | |
| Communication | RS232, 4 dry contacts, EPO, multi language graphical LCD | | | | | | | | | | | | | | |
| Dimensions HxDxW / weight | 3Ux500x440 mm, 13kg (5kW), 4Ux500x440 mm, 17kg (10kW) | | | | | | | | | | | | | | |

Solar Hybrid

1000/2000W



Applications



2 different sizes and power

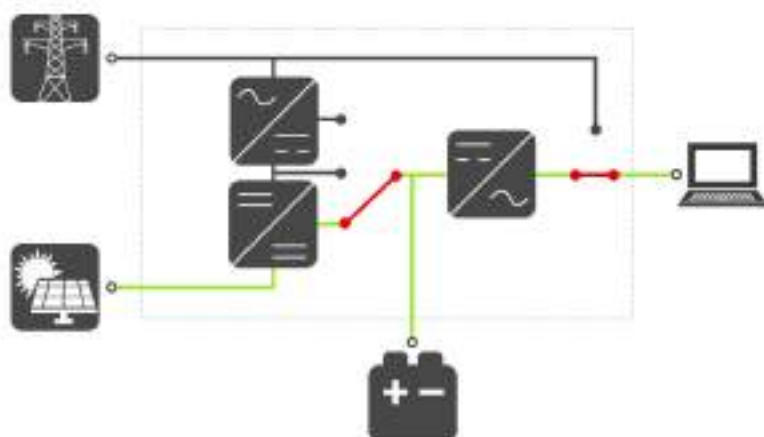


Specifications

- Solar priority logic
- Pure Sine Wave output
- Phase reversal protection
- Auto wake-up and sleep mode
- High efficiency and longer backup time
- Intelligent charger ensuring longer battery life
- 10% more solar energy by using MPPT charger
- Overload, short circuit protection and auto recovery
- 3 products in one
- Large LCD display
- 2 years warranty (electronics)

The Solar UPS series is the ideal solution for home and small office applications, such as light, TV, computer, printer etc. where the utility power is badly supplied. With pure sine wave output, true MPPT charger, intelligent charging, auto priority logic to charge from both mains and solar simultaneously, superior overload capability, longer backup time, it offers by using MPPT solar charger 10% more solar energy than others.

During normal day operation, the connected load is powered by solar energy. If the solar energy is not strong enough, all missing energy is supplied by the batteries. If both energies are not available, the system automatically switches to normal AC supply.



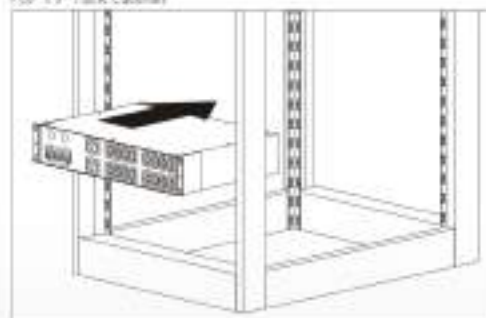


| Solar Hybrid | Model | | | |
|---------------------------------|---|---------------|---------------|---------------|
| | 1000W | | 2000W | |
| Kits | Kit N°1 | Kit N°2 | Kit N°3 | Kit N°4 |
| Solar panels | 4x180Wp | 4x250Wp | 9x180Wp | 9x250Wp |
| — AC input | | | | |
| Voltage | 150-275VAC | | | |
| Frequency | 45-65Hz | | | |
| — AC output | | | | |
| | Pure Sine Wave | | | |
| Max. apparent power | 1000VA | | 2000VA | |
| Max. AC power | 1000W | | 2000W | |
| Output voltage | 220/230VAC +/-5% | | | |
| THD (voltage) | <5% | | | |
| Frequency | 50/60Hz +/- 1% | | | |
| Max. inverter output current | 9A | | 14A | |
| Overload in bypass mode | 120% for 180sec / 150% for 3sec / then the UPS shuts down | | | |
| Overload in battery mode | 110% for 60sec / 130% for 30sec / then the UPS shuts down | | | |
| — Charger | | | | |
| | MPPT Charger | | | |
| Max. PV power | 1000W | | 2000W | |
| Max. DC voltage | 85V | | 120V | |
| Max. charge current | 40A | | | |
| Max. efficiency | 96% | | | |
| — Battery (external) | | | | |
| | GEL Type | | | |
| Battery voltage | 24VDC | | 48VDC | |
| Max. AC charger | 6A | | | |
| Max. discharge current | 50A | | | |
| Battery capacity | 24VDC - 170Ah | 24VDC - 200Ah | 48VDC - 200Ah | 48VDC - 260Ah |
| High voltage alarm | 28,4V | | 56,8V | |
| Shut down voltage | 29,2V | | 58,4V | |
| Low voltage alarm | 22,0V | | 44,0V | |
| Shutdown voltage | 20,0V | | 40,0V | |
| — Environment | | | | |
| Environmental protection degree | IP20 | | | |
| Operating temperature | 0-45°C | | | |
| Noise emission | < 50dB (1 meter from surface) | | | |
| Relative humidity | 0-90% (non condensing) | | | |
| Altitude | <2000m | | | |
| — Communication | | | | |
| Communication port | RS232, SNMP (optional) | | | |
| — Physical (UPS) | | | | |
| Dimensions (WxHxD) | 144x210x405mm | | 190x330x464mm | |
| Net weight (only hybrid UPS) | 13kg | | 18kg | |
| — Safety conformance | | | | |
| Safety | CE | | | |

ATS Static Transfer Switch 16A / 32A



For 19" rack cabinet



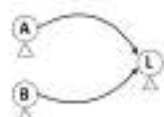
Specifications

- Uninterruptible transfer between 2 independent sources
- Can be powered by 2 UPS (with different size and power)
- Can be used as external maintenance bypass
- LCD and LED display
- For 19" rack cabinet
- Redundant power supply
- Intelligent communication interface through RS-232, USB, and 5 dry contacts
- Flexibility to use
- Input voltage : 200/208/220/230/240 (+/-5%/10%/15%/20%)
- Input voltage range : 150Vac~300Vac
- Input frequency : 50/60Hz(+/-5%/10%/15%/20%)
- Input current : 16A or 32A
- Output voltage : 200/208/220/230/240
- Electronic circuit protection
- Transfer time : 8~12ms (Typical)
- Efficiency : 99% (with full linear load)
- Standard : EN62310-2
- 2 years warranty (electronics)

Applications



LCD Display



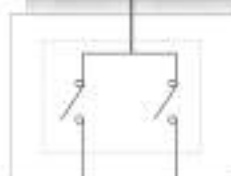
The digital LCD display shows input/output power connected to load

Version 16A (1U)

From 16A (1U)



Back 16A (1U)


 Output 3
Maximum 16A

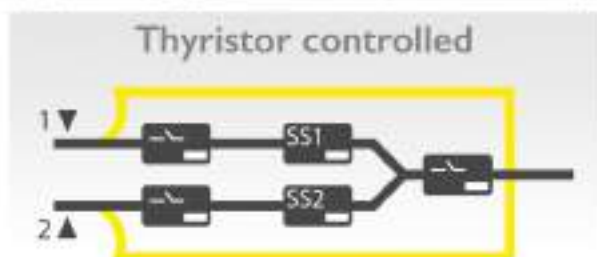
 Output 2
Maximum 10A

 Output 1
Maximum 10A

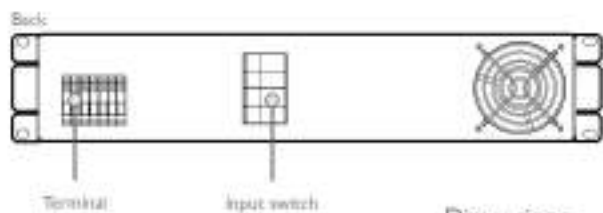
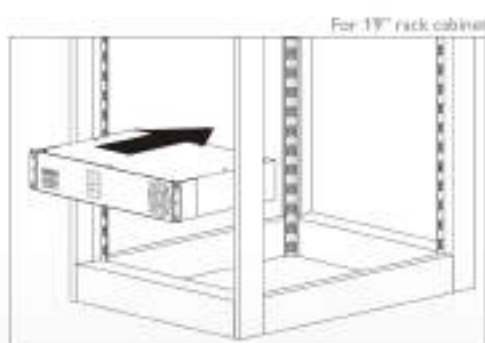
Version 32A (2U)



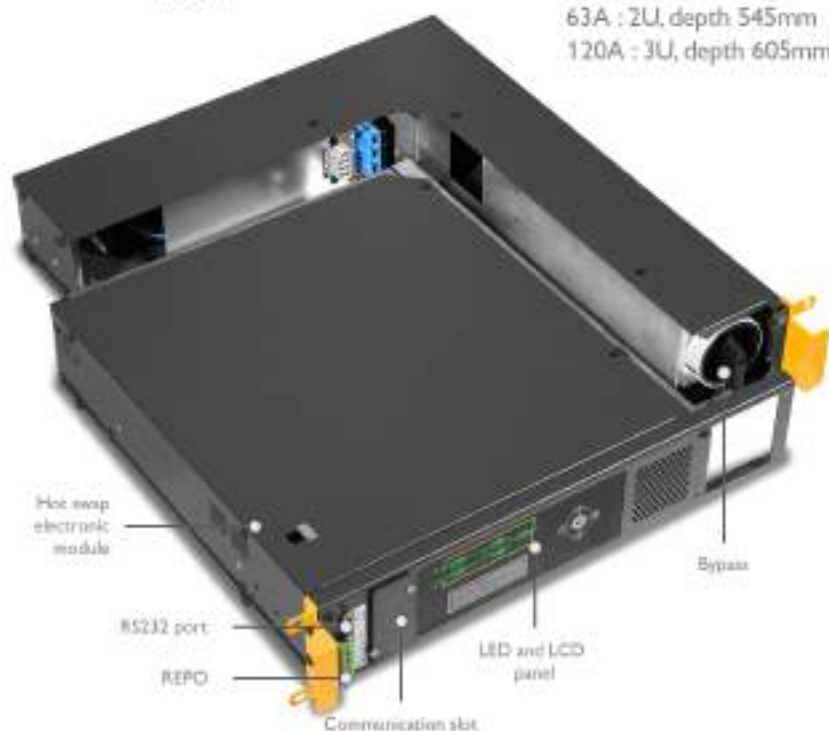
STS Static Transfer Switch 63A / 120A



Applications



Dimensions
 63A : 2U, depth 545mm
 120A : 3U, depth 605mm



Specifications

- Uninterruptible transfer between 2 independent sources - Thyristor controlled
- Can be used as external maintenance bypass
- Input voltage : 220/230/240 VAC 1F+N+Earth
- Input voltage range : 180/264 VAC Ph-N
- Input frequency : 50Hz or 60Hz
- Source priority selection
- Increase power quality
- Microprocessor controller
- Power redundancy
- Internal manual bypass
- Automatic static switch
- Transfer time : $\leq 4ms$ for synchronous sources and $\leq 10ms$ for non-synchronous sources
- RS232 standard and STS NETTCP/IP option
- Easy static and mechanical transfer to input sources
- Current distortion level less than 1%
- Power event logging
- For 19" rack cabinet

Options:

- Hot swap (electronic module)
- 2 years warranty (electronics)

STS Static Transfer Switch 50-600A



Applications



Redundant System

Power is supplied by 2 separate supply circuits that are fully independent and that can be replaced during normal operation (hot replacement mode) without any risk of causing power supply interruptions to the load. In the unlikely event of a failure at one of both power supplies, the full operation is provided by the "Power Supply back up" function, which offers auxiliary power supply to the circuits from an external, independent power source. The STS is equipped with redundant ventilation system.

Specifications

- High reliability
- Increase of the power quality
- Hot swap function
- Automatic static switching
- Superior short circuit protection
- Protection against power supply faults
- Protection against overloads and load faults
- Redundant power mode
- Total control by microprocessor
- Advanced communication LCD display such as status, alarms, information...
- Power event logging
- Easy static and mechanical transfer to input sources

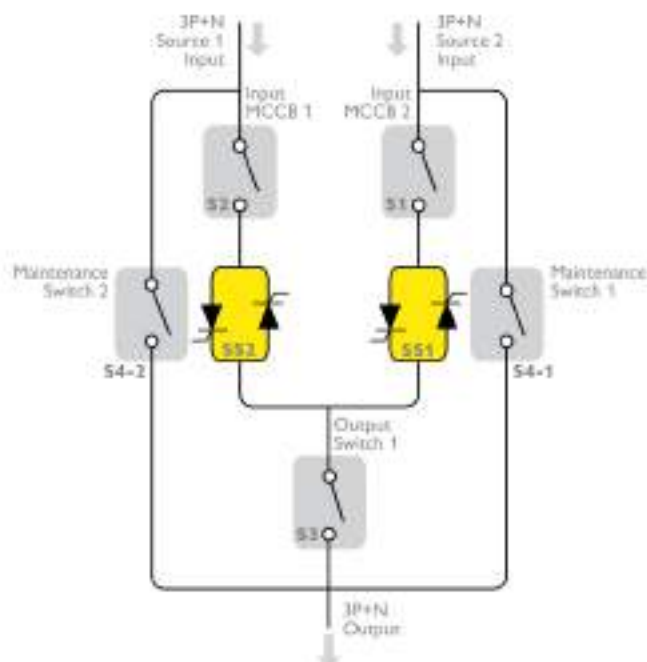
Options:

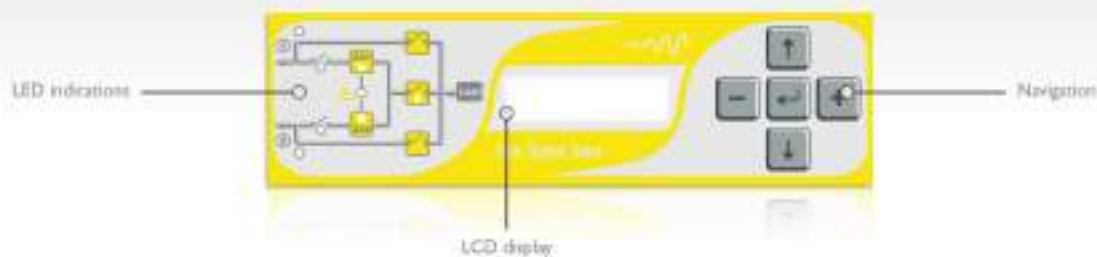
- RS485
- TCP/IP connection
- 2 serial ports

- 2 years warranty (electronics)

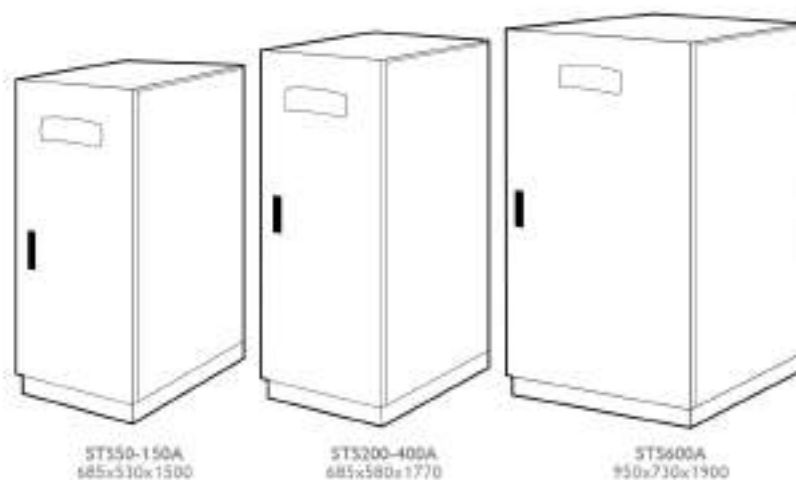
Working Principle

The Vision STS allows the load to switch between alternative and independent power sources for guaranteed redundant power. The Switch can be automatic (when a source falls outside the acceptable tolerance) or manually through the front panel control.





3 different sizes



| STS | Model | | | | | | | |
|----------------------------|--|--------|--------|------------------|--------|--------|--------------|--------|
| | STS50 | STS100 | STS150 | STS200 | STS250 | STS300 | STS400 | STS600 |
| Nominal current (A) | 50A | 100A | 150A | 200A | 250A | 300A | 400A | 600A |
| — Input | | | | | | | | |
| Nominal voltage | 380 - 400 - 415 Vac 3phase + N | | | | | | | |
| Voltage tolerance | 180 - 264 Vac selectable | | | | | | | |
| Switched input phases | 3+N (4-pole) - 3 (3-pole) | | | | | | | |
| Frequency | 50/60Hz | | | | | | | |
| Frequency range | +/-10% selectable | | | | | | | |
| Compatibility | TT, IT, TNC, TNS | | | | | | | |
| — Electrical | | | | | | | | |
| Transfer type | "break before make" | | | | | | | |
| Available transfer methods | Automatic / Manual / Remote | | | | | | | |
| Transfer time | < 4 ms (S1/S2 synchronised) and 10 ms (S1/S2 non synchronised) | | | | | | | |
| — Environment | | | | | | | | |
| Efficiency at full load | > 99% | | | | | | | |
| Noise | 55 dBA | 55 dBA | 55 dBA | 55 dBA | 55 dBA | 55 dBA | 55 dBA | 57 dBA |
| Storage temperature | -10°C up to +50°C | | | | | | | |
| Operating temperature | 0°C - 40°C | | | | | | | |
| Humidity | 95% non-condensing | | | | | | | |
| Altitude | Max 4000m | | | | | | | |
| Standards | EN62310-1 & EN62310-2 | | | | | | | |
| — Physical | | | | | | | | |
| Weight (kg) | 140 | 155 | 160 | 205 | 210 | 235 | 240 | 375 |
| Dimensions WxDxH (mm) | 685 x 530 x 1500 | | | 685 x 580 x 1770 | | | 950x730x1900 | |
| IP | IP20 | | | | | | | |

Battery Analyzer

For 6/12 Vdc batteries



Application



LCD Display

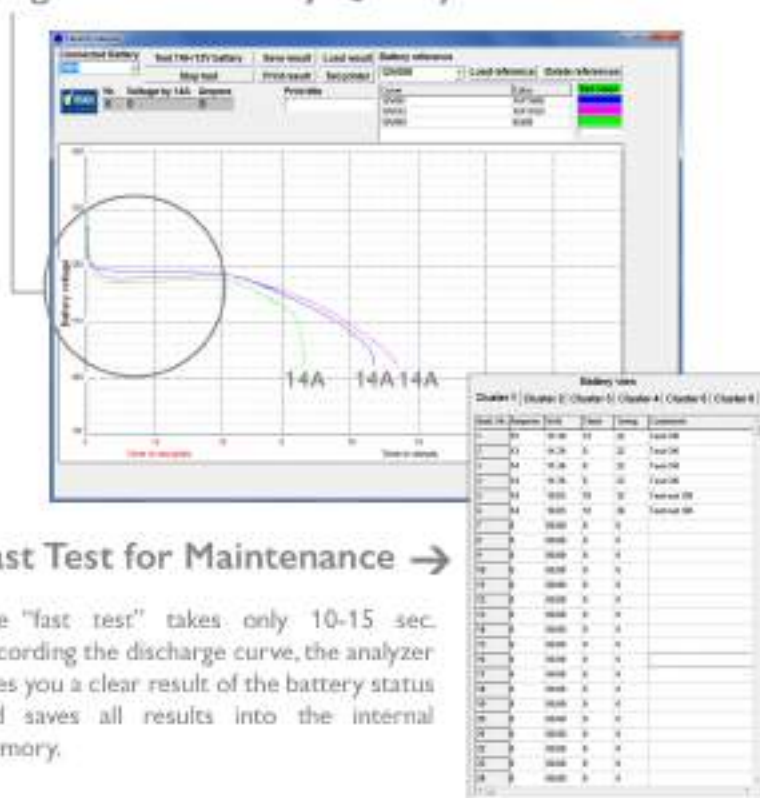
```

Temperature 9
T1: 20C    T2: 19C
T3: 21C    T4: 21C
Max= 70    F1=Save
    
```

Monitoring Software Included

The monitoring software supplies all important information about the battery. You can export and print a report or simply save the information in the internal memory of the analyzer.

Long Test for Battery Quality :



Fast Test for Maintenance →

The "fast test" takes only 10-15 sec. According the discharge curve, the analyzer gives you a clear result of the battery status and saves all results into the internal memory.

Specifications

- Reliable - quick - portable
- 100% PC compatible
- Selectable discharge current from 5-150 Amp
- Extremely fast test result (10-15 seconds)
- Large LCD display
- For 6 & 12Vdc batteries
- RS232 Communication port
- Possible "hot swapping" test
- Internal memory for 288 datas
- Data transfer to PC (tables, statistics)
- DC charger input for internal batteries
- Ideal for maintenance use or long backup test
- 2 years warranty



Batteries AGM / Gel / OPZv

2V/6V/12V 7-3000Ah



UPS

AGM: 12V7Ah to 12V200Ah



>26Ah lifetime : 10 years
<26Ah lifetime : 5 years

The AGM battery series designed with advanced technology, super heavy duty grid, high performance plates and electrolyte. The AGM battery series have long and reliable standby life and high consistency for better performance in series use.

UPS

Gel: 12V40Ah to 12V250Ah

SOLAR

HYBRID



Lifetime : 12 years

The GEL batteries can avoid corrosion and stratification. The special separator can properly prevent short-circuit. It can offer high deep discharge ability, super thermal stability, good recovery ability after deep discharging. The deep discharge cycles of GEL batteries can be more than 50% compared with other normal AGM batteries.

UPS

SOLAR

HYBRID



OPZv: 2V200Ah to 2V3000Ah

Lifetime : 15-20 years

The OPZv batteries are designed for long lifetime and have excellent deep cycle performance. The constant power discharge capability and the low current discharge of the OPZv batteries is superior to normal batteries.

Applications

- Auto control system & ATM machine
- Electronic apparatus and equipment
- Emergency light & Emergency backup power supply & Alarm/Security system
- Power generation system (solar and wind power system, etc.)
- Communication power & DC power
- Electric Power System (EPS)
- Uninterruptible Power System (UPS)

Battery cabinet

Cabinet available
up to 60 batteries 12V100Ah



BATTERY



Relay card / AS400 / Modbus

Relay cards are based on dry contacts and give signals in case of power supply interruption, switching to bypass or general faults. The AS400 and Modbus card provides to the interface the corresponding protocols.



Web / SNMP-Adapter / GPRS

SNMP-Adapters provide monitoring of the UPS via ethernet or WLAN including Email notifications. The monitoring software allows connection with the IP address of every UPS. For example all servers in a network can be shutdown. SMS can be sent without LAN connection by using a GSM Modem.



Remote control panel

The remote control panel is physically connected with the UPS by cable and allows distant monitoring and management of the system. The panel can be installed as far as 500m from the UPS and will be power supplied by the interface cable.



Galvanic isolation transformer

With the galvanic isolation transformer the electric circuits before and after the UPS are not connected physically but via an electromagnetic field. This increases the reliability of the protection. Spikes and disturbances can not pass the galvanic isolation transformer.



External Bypass

External manual bypass modules (singlephase & threephase) allow service and maintenance work without interruption of the power supply. The UPS can be disconnected after the power supply is switched to bypass line. All the STS/ATS Vision range can also be used as external bypass.

Additional chargers

External and internal chargers for batteries of higher capacity and faster charging time.



NetFeeler sensor

They are mostly used in server cabinets and for the observation. They can inform you about temperature, humidity through IP address. The sensors can also be connected to a three port SNMP adapter offered by Vision UPS.



Spike protection

The spike protection protects electrical devices from high voltage. It attempts to limit the voltage supplied to an electric device by either blocking or by shorting to ground any unwanted voltages above a safe threshold.



Outdoor UPS / IP65 / IP55

UPS with special cabinet in protection class IP65 and IP55. Used for temperatures from -30 up to +50°C.



Rail for 19" rack cabinet

The rail is the perfect tool to fix the UPS or battery pack in a 19" rack cabinet. The additional gliding function ensures very easy and fast access to the different cabinets.



Monitoring | UPS Management-software



The UPS-Management Software is a client/server application for networks and local workstations. The UPS-Management Software is connected with the UPS by RS-232/485/USB cable. The software collects the messages sent from the UPS as a background program.



If the software detects voltage variations or a power loss, it can execute different system event routines, which, for example, may shutdown the server or send warnings to connected users. These system event routines, which are part of the UPS-Management Software, are fully customisable. You can program UPS-Routines (e.g. define dates for automatic UPS-tests, shutdown the system at defined dates, etc.), check the status of the UPS, execute different UPS tests or create power quality statistics. You can also constantly monitor and evaluate the event protocol (log file) that is permanently updated. It is also possible to provide a simultaneous shutdown of several servers that are all supported by the same UPS.

- Low battery warning, on-screen backup time, battery time countdown, Low battery warning, UPS temperature such as battery and internal temperature, defect battery warning, time and date stamp event logging, extensive logging of all UPS activity and user messaging.
- Battery management, surveillance and counter for power events.
- SMTP compatible system with messaging service for E-mail, E-mail to SMS or other external services.
- Client/server software for heterogeneous networks with one and three-phased UPS.
- "Look & feel" is identical on all platforms.
- Integrated SNMP agent for Mac, NetWare, MS -WINDOWS™ NT/2000, Linux and SUN.
- Supports all important network protocols for the graphical control of the UPS from every Windows Station in the network.
- Automatic unattended shutdown of local and remote computers in networks (Master/Slave via RCCMD module)
- Selftest functions, such as economy mode, UPS temperature, battery load, power socket switching and UPS emergency cut-off.
- Shutdown and test functions can be executed with a Scheduler.
- Graphic display quality of incoming power load frequency in minimum-maximum or average values.

Software made by Generex and MegaTec.



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