



**POWER<sup>+</sup> SA Series  
10kVA-40kVA  
&  
POWER<sup>+</sup> 19"  
10kVA-20kVA**



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*Our Power, Your Confidence*

# **POWER<sup>+</sup> Stand Alone (SA) Series 10kVA-40kVA & POWER<sup>+</sup> 19" 10kVA-20kVA**

## **Lower TCO & increase ROI:**

- SAVE ON purchasing & installation costs
- SAVE ON electricity costs
- SAVE ON maintenance costs
- SAVE ON spacing costs
- SAVE ON cooling costs
- SAVE ON generator costs

## **General product Features:**

- Ultrahigh power density
- True green power and high efficiency
- Universal UPS: frequency / voltage / phase configurable on site
- User friendly
- Maximum power availability
- True online batteries and double conversion VFI topology
- Power with environmental integrity
- Power+ controller: full remote UPS management, automatic server shutdown, alerts, and management of SNMP trap by interfacing with NMS software (a standard feature in the 19" model and optional in SA models)

## POWER+ SA

### Stand Alone/Tower 10kVA On-Line double conversion UPS True on-line batteries

#### Features

- Lightweight and compact design, weighing only 18 Kg
- Flexible use - available in 3/3, 3/1 and 1/1 phase configurations
- Great performance:
  - > High efficiency AC/AC: 96%
  - > Low input THDi: <5%
  - > Input PF of 1
  - > Backlight LCD
- Available also in 208v with UL conformity
- Mainly used for Small & Medium sized applications, as well as an OEM component for large devices (such as Medical CT products)



## POWER+ SA

### Stand Alone 20/30/40kVA On-Line double conversion UPS True on-line batteries

#### Features

- Unique and compact design, weighing only 68kg (at 40kVA)
- Great performance:
  - > High efficiency AC/AC: 96%
  - > Low input THDi: 5 %
  - > Input PF: 1
  - > Backlight LCD
  - > External battery cabinets available



## POWER+19"

### 10-20kVA On-Line double conversion UPS True on-line batteries

#### Features

- The POWER +19" is a variant of the POWER+ UPS, which can be integrated as a sub rack into any standard 19" rack, for a lower cost configuration of the 10kVA and 20kVA UPS's.
- The kit includes:
  - > One or two 10kVA POWER+ modules
  - > A Controller with a built-in STSW
  - > A 19" shelf to host the POWER+ module and controller
- The kit reaches a height of 4U with one 10kva module and 6U with 2 modules.



4U height

## POWER+ SA 10kVA Technical Specifications

POWER+ SA	3/3	3/1	1/1
Topology	True online battery, double conversion		
Capacity	10 kVA / 8 kVA		
<b>Input</b>	3 phase + N + PE		1 phase + N + PE
Voltage	3 x (380 V ~ 415 V) + N + PE		(220 V ~ 240 V) + N + PE
Voltage tolerance	-27 % and +20 %		
Current	15 A per phase, no inrush current at startup		45 A, no inrush current
Power walk-in	<60 s		
Input power factor	1		
Input THDi	< 5 %		
Earth leakage current	3 mA max.		
<b>Output</b>	3 phase + N + PE		1 phase + N + PE
Rated power	10 kVA / 8 kW		
Frequency tracking range	± 3 Hz		
Slew rate	1 Hz/sec		
Voltage	3x(400 V)+N+PE	(220 V ~ 240 V) + N + PE	
Static regulation	±1 %		
Regulation for unbalanced load	±1 % for 100 % unbalanced load		
Dynamic response to 100 % load step	±2 %		
Overload	110 % for 10 min; 125 % for 60 s; 1000 % for 1 cycle		
Waveform	Sinusoidal		
THD	Less than 2 % for linear load		
Load CF (max)	6:1		
Dc/Ac efficiency (nominal)	98 %		
Ac/Ac efficiency (nominal)	96 %		
<b>Static Switch (bypass)</b>			
Input connection	Dual feed		
<b>General</b>			
Maximum power dissipation (Po=8KW)	384 W (1300 BTU/h)		
Ambient temperature	operation: -10 °C to +40 °C storage: -20 °C to +60 °C		
Relative humidity	95 % max, non-condensing		
Altitude	1500 m without derating		
Enclosure	IP20		
Cooling system	Multi-fan with speed control (forced)		
Acoustic noise (full load) at 1.5 m distance	47 dBA		
MTBF	250,000 h		
Dimensions (mm)	560(H) x 90 (W) x 600 (D)		
Weight	18 kg		
<b>LCD display</b>			
Input	Voltage, frequency, current		
Output	Voltage, frequency, current		
Batteries	Voltage		
Log (events memory)	Last 200 events		
<b>Communication</b>			
RS232	Yes		
Dry contact alarm	Yes		
SNMP	Optional		
<b>Standards</b>			
EMC	IEC 62040-2, under EMC 2004/108/EC		
Design	IEC 62040-3		
Safety	IEC 62040-1, under LVD 2006/95/EC		
Low magnetic field radiation	EMF as per ICNIRP		
<b>Batteries (external)</b>			
Type	Sealed, valve-regulated, lead-acid		
Number	64 x (5 Ah / 12 V)		
Backup time	8 min @ 100 % load; 25 min @ 50 % load		
Recharge time	4~6 h		
<b>Battery cabinet</b>			
Dimensions (cm)	45 (H) x 26 (W) x 60 (D)		
Weight	110 kg		

\* All specifications are typical and subject to change without prior notice

## POWER+ SA 20 kVA, 30 kVA, 40 kVA Technical Specifications

POWER+ SA UPS	20 kVA	30 kVA	40 kVA
Topology	True online battery, double conversion		
<b>INPUT</b>	<b>3 phase+N+PE</b>		
Voltage	3 X (380V ~ 415V) + N + PE		
Frequency tolerance	45-65 Hz		
Voltage tolerance	-27% ÷ +20%		
Power walk-In	< 60 s		
Power factor	1		
THDI	<5 %		
Earth leakage current	3 mA		
<b>OUTPUT</b>	<b>3 phase+N</b>		
Rated power	20 kVA / 16 kW	30 kVA / 24 kW	40 kVA / 32 kW
Frequency tracking range	±0.5, ±1, ±2, ±3, ±4Hz (selectable)		
Slew rate	1 Hz/sec		
Voltage	3x400 V		
Frequency	50 Hz		
Static regulation	±1 %		
Regulation for unbalanced load	±1 % for 100 % unbalanced load		
Dynamic response to 100% load step	2 %		
Overload	110 % for 10 min.; 125 % for 60 sec.; 1000 % for 1 cycle		
Waveform	Sinusoidal		
THD	Less than 2 % for linear load		
Load CF (max)	6:1		
DC/AC efficiency (nominal)	98 %		
AC/AC efficiency (nominal)	96 %		
<b>STATIC SWITCH (bypass)</b>			
Input connection	Dual feed		
<b>GENERAL</b>			
Maximum power dissipation (Po=8KW)	666 W (2274 BTU)	999 W (3408 BTU)	1332 W (4544 BTU)
Ambient temperature	-10 °C to +40 °C (operating); -20 °C to +70 °C (storage)		
Relative humidity	95 % max non-condensation		
Altitude	1500 m without derating		
Enclosure	IP20		
Cooling system	Multi-Fan with speed control (forced)		
Acoustic noise (full load) @1.5m distance	54 dBA	57 dBA	
MTBF	250,000 h		
Dimensions (H x W x D) (mm)	660 x 480 x 580		
Weight (electronic cabinet)	50 kg	59 kg	68 kg
<b>COMMUNICATION</b>			
Dry contact alarms	Yes		
SNMP/ Web	Yes		
<b>LCD DATA DISPLAY</b>			
Input	Voltage, frequency, current, power		
Output	Voltage, frequency, current, power		
Batteries	Voltage		
Log (events memory)	Last 256 events		
<b>STANDARDS</b>			
EMC	IEC 62040-2, under EMC 2004/108/EC		
Design	IEC 62040-3		
Safety	IEC 62040-1, under LVD 2006/95/EC		
Low magnetic field radiation	EMF as per ICNIRP		
<b>BATTERIES</b>			
Type	Sealed, valve regulated, lead-acid		
Number	64x12 V		
Battery cabinet	External		
DC voltage	± 432 V		

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## POWER+ 19" Technical Specifications

POWER+ 19" UPS	10kVA	20kVA
Topology	True Online Battery, Double Conversion, VFI	
<b>INPUT</b>		
Voltage	3 x (380 V~ 415V) + N +PE	
Voltage Range	27%- ÷ +20%	
Current	3 x 15A per module, no inrush current at startup	
Power Walk-In	< 60 sec	
Frequency	45÷65 Hz	
Power Factor	0.99	
THDI	5%	
<b>OUTPUT</b>		
	<b>3 phase +N</b>	
Rated Power	10kVA/8kW	20kVA/16kW
Frequency Tracking Range	± 0.5, ± 1, ± 2, ± 3, ± 4Hz (selectable)	
Slew Rate	1 Hz/sec	
Voltage	3 x 400 Vac+N	
Static Regulation	± 1%	
Regulation for Unbalanced Load	± 1% for 100% Unbalanced load	
Dynamic Response to 100% Load Step	± 2%	
Overload	110% for 10 min.; 125% for 60 sec.; 1000% for 1 cycle	
Waveform	Sinusoidal	
THD	Less than 2% for linear load	
Load CF (max)	6:1	
DC/AC Efficiency (nominal)	Up to 98% at full load	
AC/AC Efficiency (nominal)	Up to 96% at full load	
<b>GENERAL</b>		
Maximum Power Dissipation (Po=8KW)	333W (1316 BTU/h)	666W (2274 BTU/h)
Ambient Temperature	10-0c to +400c (operating); -200c to +600c (storage)	
Relative Humidity	95% max non-condensing	
Altitude	1500 m without derating	
Enclosure	IP20	
Cooling System	Multi-Fan with speed control (forced)	
Acoustic Noise (full load) @1.5m distance	51dBA	54dBA
Dimensions (H x W x D) in mm	193 (4U) x 483 (19 in.) x 600	264 (6U) x 483 (19 in.) x 600
Weight (approx.)	19.9Kg	31.7Kg
<b>STANDARDS</b>		
EMC	IEC 62040-2, under EMC 2004/108/EC	
Design	IEC 62040-3	
Safety	IEC 62040-1, under LVD 2006/95/EC	
Low Magnetic Field Radiation	EMF as per ICNIRP	
<b>BATTERIES</b>		
Type	Sealed, valve regulated, lead-acid	
Number	64x12 V	
Battery cabinet	External	
DC voltage	± 432 V	

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