

POWER +

10kVA to 100kVA



Next Generation UPS

- ✓ True Modularity
- ✓ True Rightsizing
- ✓ True Green Power
- ✓ True On-line

Technology Associates:



GAMATRONIC™
Our Power Your Confidence

Ador PowerAce

True Online UPS System

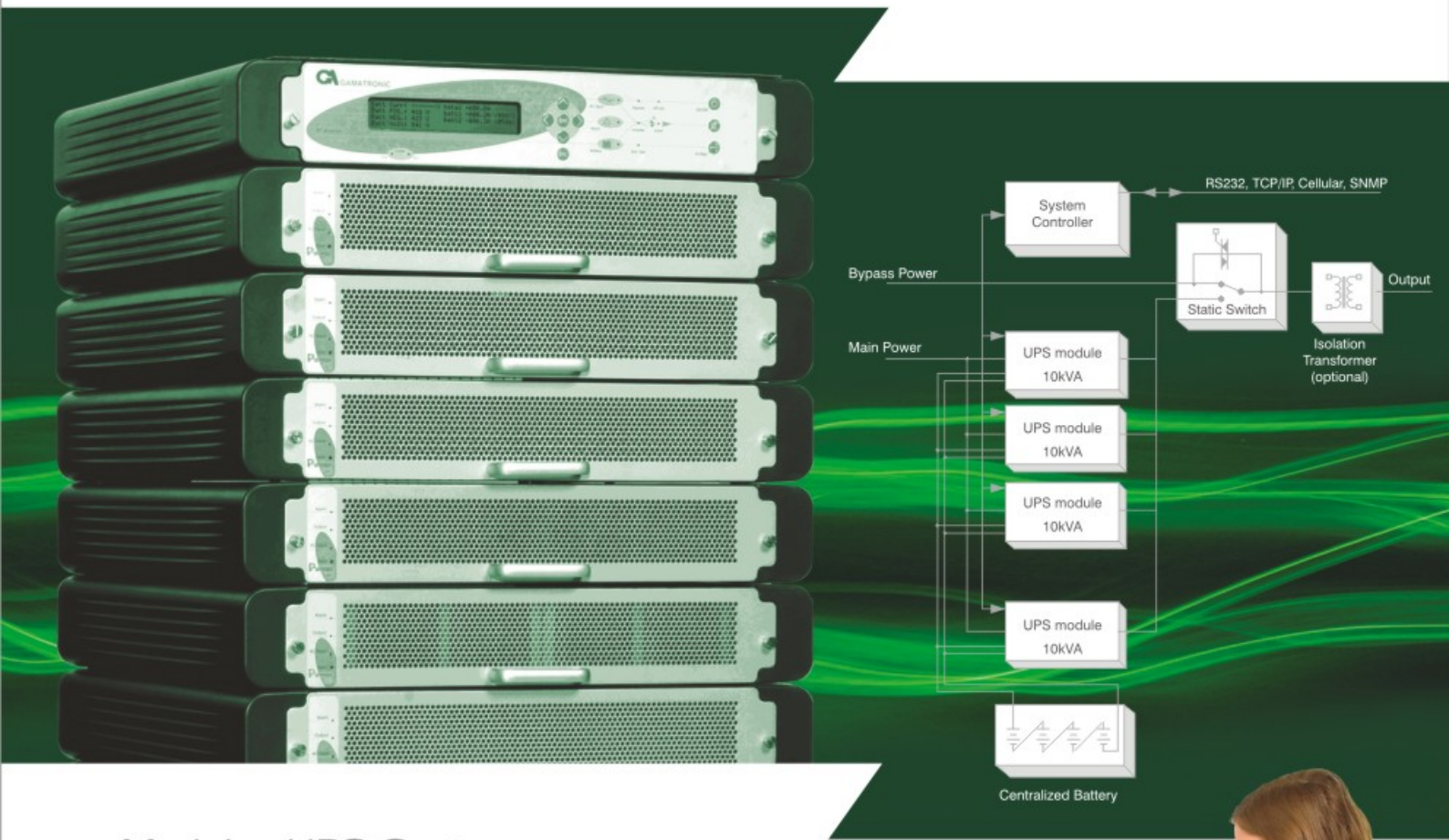
Ador Powertron Ltd., is a leading and reputed company in Digital Power Electronic which is a part of the renowned, 55 years old prestigious '**ADOR**' group. Ador is a complete solution provider in designing, manufacturing and commissioning of complex and customized Power electronic equipments for various industries.

Ador has technology alliance with the world leader in Power Electronics **M/s. Gamatronic Electronic Industries Ltd., Israel**. Gamatronic has over 35 years of experience in high-end pure power UPS solutions.

"POWER⁺" true online modular Uninterrupted Power Supply - UPS system based on True Online Battery Topology, upgraded from 10kVA-500kVA at any type without interrupting the load. **POWER⁺** has maximum safety without transferring the load to bypass source.

Ador-Gamatronic POWER⁺ UPS is the next generation system especially designed with unmatched reliability, pure Power quality and very high electrical efficiency for critical enterprise networking applications, Data Processing Machines ,Servers, VSAT Communication Networks, Switching equipments, Network Process Control, Telecommunication, Life saving medical applications and such other applications where systems availability cannot be comprised at all.

The **POWER⁺** is a superb concept in UPS technology and marked the beginning of a new generation of UPS.



Modular UPS System-

- ▶ Hot Swap Plug-In Modules
- ▶ Redundancy
- ▶ Flexibility & expansion option
- ▶ Incredible Power density (volume per capacity)
- ▶ Management & communication options
- ▶ User and environment friendly system
- ▶ Smaller footprint
- ▶ Lower heat Dissipation



Our UPS Grows With Your Business



Parallel Redundant Structure

POWER⁺ is a parallel redundant UPS. The system comprises from 1 to 10 UPS modules each of 10kVA, a system controller, Centralized static switch module and distribution block. It can be configured as a 3/3, 3/1 or a 1/1 system in short safer load.

Flexibility and Modularity

POWER⁺ gives you maximum flexibility - it can be extended as the load increases by simply sliding in required modules.

POWER⁺ is truly Modular - Ungradable from 1 to 10 modules, each of 10kVA, allowing you to assemble a UPS system of 100kVA.

Green Power System

POWER⁺ is based on green Power technology. The system has a unity input Power factor (0.99) and very low input THD. It operates in Continuous Current Mode (CCM), reducing line interferences (RFI/EMI).

In short clean environment!

Active Current Sharing

The system has active current sharing at the input/output and battery.

In short higher reliability!

True On-Line Battery VFI

POWER⁺ is designed according to IEC-62040-3 standard: "The Inverter always supplies power to the load and it takes its power either from the A.C. input via the Rectifier or from the Battery. The Rectifier has to be controlled so as to recharge and maintain the battery in a charged condition". In other words, the Battery is connected between Rectifier output and Inverter input on common DC link.

High Efficiency

POWER⁺ has an output efficiency of up to 96% and 98% efficiency during backup mode.

In short savings on electricity bills!

Light & Compact

Only 9Kg per module!

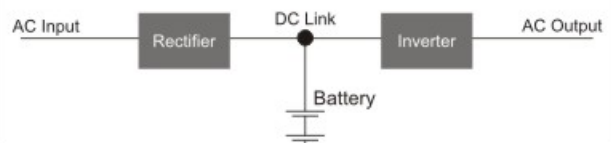
POWER⁺ light weight and small dimensions allows for easy maintenance, reduced shopping costs and smaller foot print.

Decentralized Static Switch for Parallel Operation

In parallel system configuration, **POWER⁺** systems operates in a decentralized mode, where internal static switches of all the systems are synchronized. This ensures that all units can transfer to static switch bypass simultaneously without the addition of external static switches - lowering expenses and eliminating a significant potential point of failure.

Double Conversion True On-Line Battery (VFI)

According to IEC 62040-3



Technical Specifications

Topology	True Online Battery, Double Conversion VFI									
Construction	Modular Parallel Hot-Plugged Module, Continuous Operation									
INPUT										
Voltage	3 X 400V + N									
Voltage Range	-20%, + 15%									
Current	15A (max) per single module, no inrush current at startup									
Frequency	47 -63 Hz									
Power Factor	0.99									
THD i	5% on nominal load									
OUTPUT										
Rated Power	10kVA/8kW to 100kVA/80kW									
Frequency Tracking Range	$\pm 1, \pm 2, \pm 3$ Hz (selectable)									
Frequency (in free running mode)	50/60Hz $\pm 0.1\%$									
Slew Rate	1Hz/sec									
Voltage	3 X 400 + N									
Static Regulation	$\pm 1\%$									
Regulation for unbalanced load	1% for 100% unbalance load									
Dynamic Response to 100% load step	$\pm 2\%$									
Overload	110% for 10 min.; 125% for 60 sec.; 1000% for 1 cycle									
Wave form	Sinusoidal									
THD	< 2% for linear load, < 5% for non-linear load									
Load CF	3:1									
AC-Ac Efficiency (nominal)	Up to 96%									
DC-AC Efficiency (nominal)	Up to 98%									
BATTERIES										
Type	Sealed Maintenance Free (SMF) VRLA, Tubular lead acid									
DC-Link Voltage	± 340 to 425V									
No. of Batteries	64 X 12V									
GENERAL										
Maximum Power dissipation (Po = 8kw)	333W (1136 BTU) for a single module									
Ambient Temperature	-10°C to +40°C (operating) -20°C to +60°C (Storage)									
Relative Humidity	95% Max non-condensing									
Altitude	1500m w/o derating									
Enclosure	IP20									
Cooling	Forced-Multi-Fan with speed control									
LCD DATA DISPLAY										
Input	Voltage, Current, Frequency									
Output	Voltage, Current, Frequency									
Batteries	Voltage									
Log event memory	Last 200 events									
STANDARDS										
EMC Emission	EN50091-2 Class A; IEC 62040-2 Class A									
Safety	EN50091-1; IEC 62040-1-1									
Design	EN50091-3; IEC 62040-3									
Low Magnetic Field Radiation	EMF as per ICNIRP									
DIMENSION										
10kVA Module (H X W X D)	88mm (2U) X 483 (19") X 455mm									
Weight	9Kg									
POWER* System (Incl STSW and base modules)										
Model	10kVA	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	90kVA	100kVA
Dimension (mm) H	690	790	880	970	1070	1160	1250	1350	1440	1540
W	600 (external)									
D	690									
Weight (Kg)	98	113	128	143	158	173	188	203	218	233
ACOUSTIC NOISE @ 1.5m from front of unit										
Noise (dBA) Half load	48	52	53	54	55	55.8	56.4	57	57.5	58
Noise (dBA) Full load	51	54	55	57	58	58.8	59.4	60	60.5	61

* All specifications are subject to change without prior notice



POWER⁺ 19"

POWER⁺ 19" allows you house the excellent UPS module, controller and STSW in any 19" rack.

This solution allows you a lower cost solution for 10kVA and 20kVA in 19" rack.

The kit includes 10kVA **POWER⁺** module, controller with STSW and a 19" shelf to house the above.

Flexible use - available in 3/3, 3/1 and 1/1

Dimensions:

Height: 4U for 10 kVA; 6U for 20kVA

Width: 19"

Depth: 600 mm (including plug-in connectors in rear side of shelves)

POWER⁺ Controller



POWER⁺ system is supplied with an integral **POWER⁺** Controller that enables full remote UPS management through web access. This includes display of active alarms and alarm log access, automatic server shutdown, email alerts, and management of SNMP trap for interface with NMS software. Together with the optional external cellular modem, **POWER⁺** can also provide SMS alerts and enable remote cellular commands.

Control & Management

POWER⁺ can be managed and controlled via variety of communication options like TCP/IP, wireless cellular communication etc.

WING

WING is a GSM cellular communication device, installed on UPS and DC systems, which provides SMS alerts of predefined system events to end users or control centers.

G4 and G-Eye

Available for both manned and unmanned sites, the G4 and G-Eye Management and Monitoring Systems deliver user-friendly unit monitoring, control and management of physical UPS sites - including temperature and humidity, movement and doors, air conditioning units, servers, power devices, and more.



PSM

PSM P + is Windows-based shutdown software supported by WIN 2000/XP/2003, installed on a local PC and connected to **POWER⁺** in the LAN. Shutdown of all Unix-based and Netware computers is supported through the master computer.

GEMSi

Supporting both Gamatronic and a wide range of other power products, GEMSi (Gamatronic Element Management System) is a user-friendly application that provides real time remote monitoring and management of up to 1600 UPS control units at diverse and distributed sites.





“POWER +” Modular UPS solution is an excellent choice for :

- Data Centers
- IT, ITES
- Servers
- Local Area Networks
- Telecom Facilities
- Medical Equipments
- Industrial PLCs
- Industrial Processes
- Emergency Devices (lights/alarms)

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