

Next Generation Modular UPS System



Power **BUILD**

10KVA to 100KVA

- True On Line
- Parallel Redundant
- Green Power
- High Efficiency
- Double Conversion
- Modular Design

Aplab POWERBUILD series modular UPS systems are of state-of-the-art design with true On Line battery and double conversion topology. Modular design makes scalability simple to increase capacity. Advanced management and communication capabilities ensure remote monitoring and control via internet and cell phone. High power density with smallest footprint. Very low heat dissipation at full load due to high operating efficiency. Hybrid static switch ensures high reliability and compliance to relevant IEC standards.



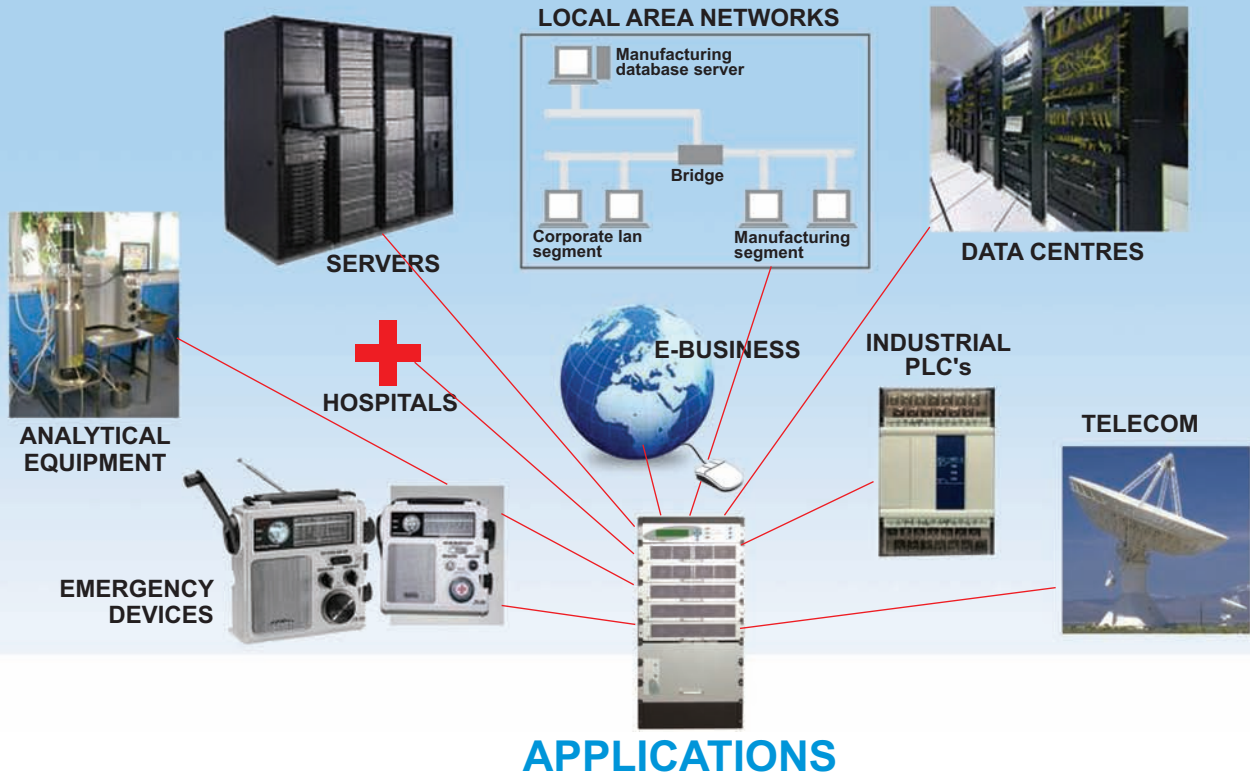
STACKABLE SYSTEM

Our UPS grows with your business

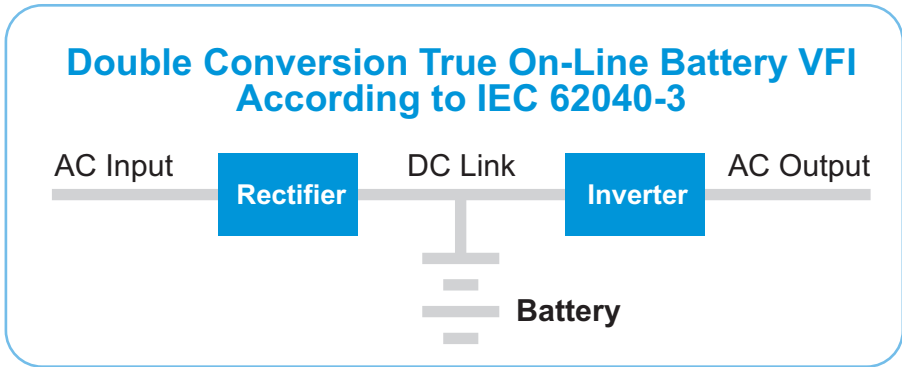
On line battery using double conversion topology

The **POWERBUILD** Inverter complies with IEC 62040-3 standards to draw DC power from Rectifier and battery which is hard wired to the common DC bus between

rectifier output and inverter input. The rectifier is softwarecontrolled to intelligently manage the recharging of batteries and maintain them in charged condition.



Scalable design— Add modules On Line to match the increase in demand
POWERBUILD is a modular design that is easily ungradable by the user with hot swappable modules to meet the growing demand. Up to 10 modules, each weighing about 9Kgs, can be plugged in On Line to enhance the capacity. **POWERBUILD** can be configured for N+1 or N+2 parallel redundancy.



Parallel POWERBUILD systems

POWERBUILD systems canbe connected in parallel decentralized topology to expand the capacity beyond 100KVA

Technical Specifications

Topology	Modular online battery double Conversion VFI
Construction	Modular parallel hot-plugged modules, continuous operation
INPUT	
Voltage	3 x 380/400V + N
Voltage Range	-27%, +20%
Current	15A per phase for a single module, no inrush current at startup
Frequency	47 – 63Hz
Power Factor	0.99
THDI	5%
OUTPUT	
Rated Power	10kVA/8kW to 100kVA/80kW
Frequency Tracking Range	±1, ±2 and ±3Hz (selected)
Frequency (in free-running mode)	50/60Hz ±0.1%
Slew Rate	1Hz/sec voltage 3 x 380/400V + N adjustable
Static Regulation	±1Hz
Regulation for Unbalanced Load	±1% for 100% unbalanced load
Dynamic Response to 100% Load Step	±2%, 1ms recovery time
Overload	110% for 10min: 125% for 60sec: 1000% for 1 cycle
Waveform	Sinusoidal
THD	Less than 2% for linear load

Load Crest Factor max	6:1
AC to AC Efficiency (nominal)	Up to 96%
DC to AC Efficiency (nominal)	Up to 98%
BATTERIES	
DC-Link Voltage (nominal)	±384V
No. of Batteries	2 x 32 nos. of 12V
GENERAL	
Max Power Dissipation (Po = 8kW)	333W (1136 BTU) for single module
Ambient Temperature	-10° – +40° (operating); -20° – +60° (storage)
Relative Humidity	95% max non-condensing
Altitude	1500m above MSL without derating
Enclosure	IP-20
Cooling	Forced air using multi fans with speed control
STANDARDS	
EMC Emissions	EN50091-2 class A; IEC 62040-2
EMC Immunity	EN50082-2
Safety	EN50091-1; IEC 620240-1-1
Design	EN50091-3; IEC 62040-3
DIMENSIONS	
10kVA Module (H x W x D) (mm)	88(2U) x 483 (19") x 455
Weight	9Kg

POWERBUILD system (includes STSW and Base modules)

Model	10kVA	20kVA	30kVA	40kVA	50kVA	60kVA	70kVA	80kVA	90kVA	100kVA
WxDxH (cm)	60 x 69 x 107					60 x 69 x 154				
Wt. (Kg)	98	113	128	143	158	173	188	203	218	233

ACOUSTIC NOISE (at 1.5m distance from panel)

dBA	51	54	55	57	58	59	59	60	61	61

* All specifications subject to change without prior notice



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