



A MEMBER OF THE ABB GROUP

PowerVario 1-10 kVA

Maximum power protection
for home and office.

Single-phase
UPS System



Innovative UPS Technology



PowerVario

The single-phase UPS solution.

Benefits at a glance

- Compact design
- Combined 19" rack and tower version
- 4, 5, 6 and 10 kVA can be connected for parallel redundancy
- Communication interfaces: RS-232, USB, SNMP card (optional), modbus card (optional), relay card (optional), potential free contacts, EPO contact inputs
- Outlets switchable via software or Web browser (1–3 kVA)
- Frequency converter adjustable
- Eco mode function adjustable

The devices of the type series PowerVario are multifunctional single-phase UPS systems providing uninterruptible power supply for servers, networks, storage systems, VoIP equipment and telecommunications equipment. The UPS system can be used as a stand-alone or 19" rack configuration with Newave connectivity options. It is the perfect solution for mission critical applications which require high reliability, availability and performance.

PowerVario completely regenerates the utility power to correct power disturbances in the mains. The unit provides clean AC power with Voltage and Frequency Independency from the mains power supply (VFI).

Investing in the future: The PowerVario system is fully modular and allows you to increase overall power output, battery run-time and redundancy as your needs and requirements grow. The modular design eliminates any single point of failure.

Maximum power with parallel redundancy

All of the PowerVario devices allow the user to easily replace the battery packs without interrupting the critical load. The models 4.5–10 kVA are equipped with a latchable Safe-Swap™ connector for the shortest possible „Mean Time To Repair“ (MTTR). Optional and additional battery modules for extended battery run-time.

PowerVario automatically manages the end-discharge voltage according to the load. The Advance Battery Discharge Management (ABDM) prevents deep discharge of batteries during a power failure.

To increase the power capacity when configuring a parallel redundant system, up to three PowerVario systems are simply interconnected using the CAN-bus (RJ45) on the rear of the PowerVario series.

Option:

ParaDis™, a combined service bypass and distributor for 4.5 and 10 kVA. Versions are available for 1, 2 or 3 x UPS to create 1+1 or 2+1 redundancy with safe-swap connection.



Technical specifications

PowerVario 1-10 kVA

GENERAL	PowerVario				PowerVario					
Model	PVO11/ 1K	PVO11/ 2K	PVO11/ 3K	PVO11S/ 2K	PVO11S/ 3K	PVO11/ 4.5K	PVO11/ 6K	PVO11S/ 6K	PVO11/ 8K	PVO11/ 10K
Power (kVA)	1	2	3	2	3	4,5	6	6	8	10
Active power (kW)	0,8	1,6	2,4	1,6	2,4	4,05	5,4	4,8	7,2	9,0
Power factor	0,8	0,8	0,8	0,8	0,8	0,9	0,9	0,8	0,9	0,9
Autonomous time (standard battery)	6 min	6 min	5 min	6 min	5 min	8 min	6 min	6 min	7 min	5 min
Topology	True double conversion (online/VFI)									
Parallel configuration	–					Parallel capable up to 3 units (4,5–10 kVA)				
UPS type	Standalone									
INPUT										
Nominal voltage	1 x 200 V/208 V/220 V/230 V/240 V + N									
Voltage range	160–288 V									
Distortion THDi	< 6 % to 100 %									
Frequency	50–60 Hz									
Power factor at 100 % load	0,99									
OUTPUT										
Voltage	1 x 208 V/220 V/230 V/240 V + N, adjustable (standard: 230 V)									
Distortion (at linear load)	< 3 %									
Safety factor	3 : 1									
EFFICIENCY										
Overall efficiency	Up to 92 %									
Eco-mode at 100 % load	–					Up to 98 % (4,5–10 kVA)				
COMMUNICATIONS										
Communication interfaces	RS-232, USB, SNMP card									
Communication interface input	External switch-off									
STANDARDS										
Safety	IEC/EN 62040-1-1, IEC/EN 60950-1									
Electromagnetic compatibility (EMC)	IEC/EN 62040-2, IEC/EN 61000-3-2, IEC/EN 61000-3-3									
Performance	IEC/EN 62040-3									
Product certification	CE									
Protection rating	IP 20									
Manufacture	ISO 9001:2000									
WEIGHT, DIMENSIONS										
Weight (kg)	17	30	33	27	30	92	92	92	96	96
Dimensions W x H x D (mm)	89x445 x490	89x445x660		117x445 x420		222x445x660		309x445 x580	264x445x680	
OPTIONS										
Accessories	External bypass, additional battery packs, output distributions, 19" pull-out rack rails									



Technical specifications

PowerVario Line Interactive 1-3 kVA

Contact us

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GENERAL	PowerVario			
Model	PVO LI 1K	PVO LI 1.5K	PVO LI 2.2K	PVO LI 3K
Power (kVA)	1	1,5	2,2	3
Maximum output power (kW)	0,9	1,35	1,98	2,7
Power factor	0,9			
Autonomous time (standard battery) (min)	5			approx. 8
Topology	Line Interactive			
Parallel configuration	-			
UPS type	Standalone			
INPUT				
Nominal voltage	Single-phase, 172-288 VAC			
Voltage	172-288 VAC			
Distortion THDi	< 6 % to 100 %			
Frequency	50–60 Hz			
Power factor at 100 % load	0,99			
OUTPUT				
Voltage	1 x 208 V/220 V/230 V/240 V + N, adjustable (standard: 230 V)			
Distortion (at linear load)	< 3 %			
Safety factor	3 : 1			
EFFICIENCY				
Overall efficiency	Up to 95 %			
COMMUNICATIONS				
Communication interfaces	RS-232, USB, SNMP card			
Communication interface input	External switch-off			
STANDARDS				
Safety	IEC/EN 62040-1-1, IEC/EN 60950-1			
Electromagnetic compatibility (EMV)	IEC/EN 62040-2, IEC/EN 61000-3-2, IEC/EN 61000-3-3			
Performance	IEC/EN 62040-3			
Product certification	CE			
Protection rating	IP 20			
Manufacture	ISO 9001:2000			
WEIGHT, DIMENSIONS				
Weight (kg)	19,4	20,9	33,8	37,2
Dimensions W x H x D (mm)	89 x 445 x 490		89 x 445 x 657	
GEWICHT, ABMESSUNGEN				
Accessories	External bypass, additional battery packs, output distributions, 19" pull-out rack rails			