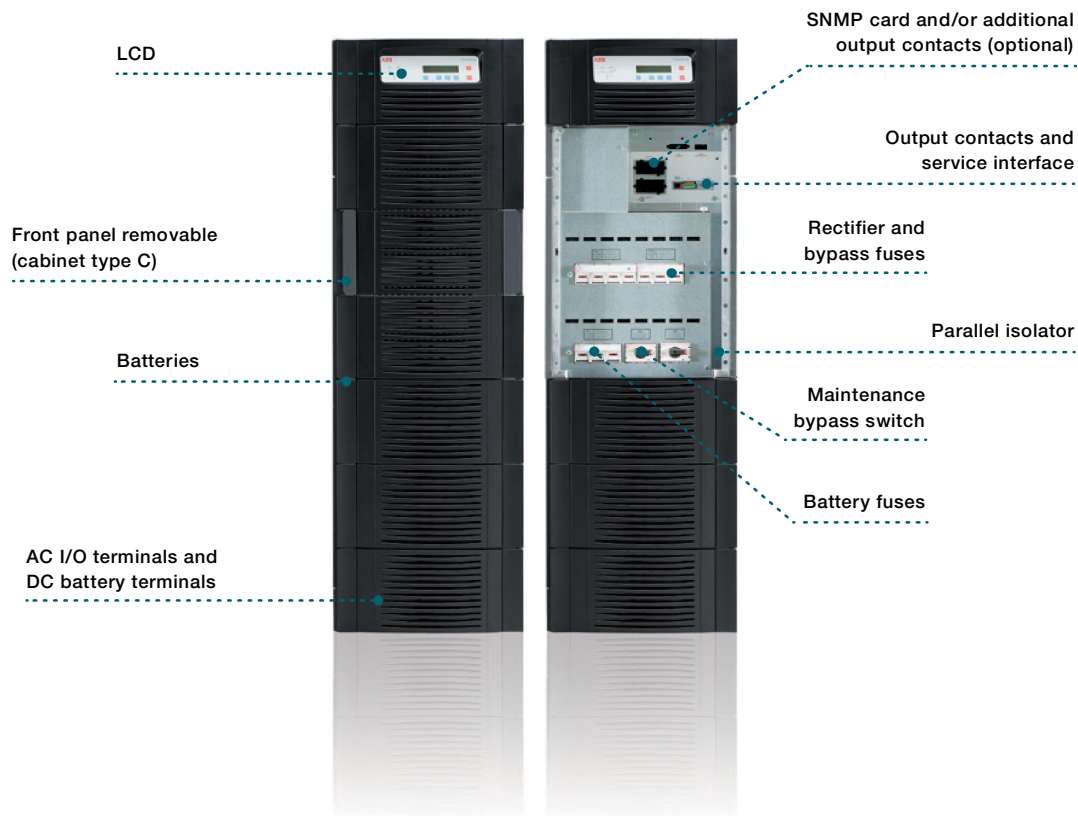


PowerScale

The three-phase UPS for low power applications



PowerScale is an online, double conversion, VFI (voltage frequency independent) UPS that provides enhanced power protection in a compact format. Its outstanding price/performance delivers the best value for money in its category

with uncompromised system reliability and power availability. PowerScale is available in three cabinet sizes, enabling you to choose the ideal capacity and required autonomy for your critical load.

High reliability

- Online double conversion technology
- Parallelable systems for increased redundancy

Low cost of ownership

- Scalable power and autonomy time
- Small footprint/high power density
- High efficiency at partial and rated loads (up to 95.5%)
- Reduced installation costs
- Ripple-free and temperature controlled battery chargers extend battery life time performance
- Low input harmonic distortion (THDi <3%)

Flexible design

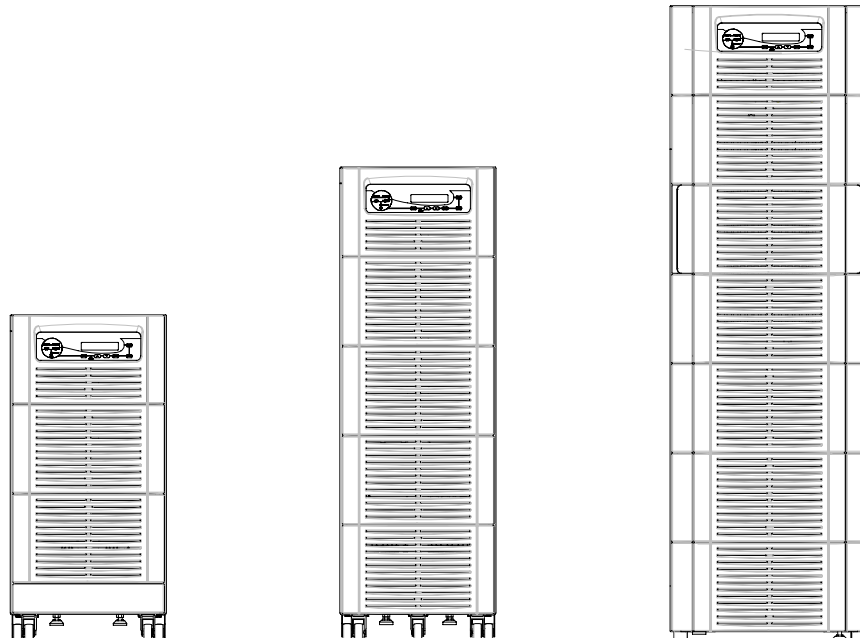
- Available in seven power ratings and three cabinet sizes
- Parallel capacity up to 20 units
- External battery cabinets for extended autonomy

Efficient service concept

- Manually operated maintenance bypass switch
- User-friendly LCD
- Ergonomic design for easy serviceability
- Remote monitoring and connectivity options

PowerScale

Available models



Cabinet type	Cabinet A: 10–20 kVA	Cabinet B: 10–25 kVA	Cabinet C: 25–50 kVA
Dimension w × h × d	345 × 720 × 710 mm	345 × 1045 × 710 mm	440 × 1400 × 910 mm
Internal battery capacity	Up to 48 blocks 7 / 9 Ah	Up to 96 blocks 7 / 9 Ah	Up to 144 blocks 7 / 9 Ah or 48 blocks 24 / 28 Ah

UPS cabinet configuration

- Online double conversion UPS
- Capacities from 10 kVA to 50 kVA in three different cabinet sizes
- Input, bypass and battery protection fuses
- Manual bypass switch
- Up to 95.5% efficiency across a wide load range
- Single- and dual-input feed available
- Communication interfaces: RS-232 and USB ports, I/O dry contacts (EPO, GEN On, ...)
- Free space to place internal batteries

Options

- Integrated back-feed protection
- Parallel kit
- Cold start
- IP 21
- Halogen-free cabling
- Battery temperature sensor
- Communication interfaces: Relay card, ModBus RS-485, ModBus TCP/IP, SNMP
- Internal batteries
- External battery cabinets

PowerScale

Technical specifications

General data	10 kVA	15 kVA	20 kVA	25 kVA	30 kVA	40 kVA	50 kVA
Output power max.	9 kW	13.5 kW	18 kW	22.5 kW	27 kW	36 kW	45 kW
Output power factor	0.9						
Topology	Online double conversion						
Parallel configuration	Up to 20 units in parallel configuration						
UPS type	Standalone						
Inbuilt batteries	Yes						
Input							
Nominal input voltage	3 × 380 V / 220 V + N, 3 × 400 V / 230 V + N, 3 × 415 V / 240 V + N						
Voltage tolerance	For loads <100% (–10%, +15%), <80% (–20%, +15%), <60% (–30%, +15%)						
(referred to 3 × 400 V / 230 V)							
Input distortion THDi	≤3 at 100% (sine wave)						
Frequency	35–70 Hz						
Power factor	0.99 at 100% load						
Output							
Rated output voltage	3 × 380 V / 220 V + N, 3 × 400 V / 230 V + N, 3 × 415 V / 240 V + N						
Voltage tolerance	1% (static), 4% (dynamic)						
(referred to 3 × 400 V / 230 V)							
Voltage distortion	<2% linear load, <4% non-linear load (IEC / EN62040-3)						
Frequency	50 Hz or 60 Hz						
Overload capability	10 min.: 125% or 1 min.: 150% (at cos phi 0.8); 10 min.: 110% or 1 min.: 130% (at cos phi 0.9)						
Unbalanced load	100% (all three phases regulated independently)						
Crest factor	3:1 (load supported)						
Efficiency							
Overall efficiency	Up to 95.5%						
In eco-mode	98%						
configuration							
Environment							
Storage temperature	–25 °C to +70 °C						
Operating temperature	0 °C to +40 °C						
Altitude	1000m without derating						
Battery							
Battery type	7 Ah / 9 Ah / 28 Ah, sealed, lead-acid, maintenance-free						
Battery replacement	Field-replaceable						
Battery voltage	Flexible voltage for longer backup times						
Battery capacity	48 or	48 or	48 or	96 or	144 × 7 / 9 Ah	144 × 7 / 9 Ah	144 × 7 / 9 Ah
	96 × 7 / 9 Ah	96 × 7 / 9 Ah	96 × 7 / 9 Ah	144 × 7 / 9 Ah	or 48 × 28 Ah	or 48 × 28 Ah	or 48 × 28 Ah
Communications							
LCD	Yes (per module)						
LEDs	LED for notification and alarm						
Communication ports	RS-232, SNMP slot (USB and potential-free contacts optional)						
Standards							
Safety	IEC / EN 62040-1						
Electromagnetic	IEC / EN 62040-2						
compatibility (EMC)							
Performance	IEC / EN 62040-3						
Product certification	CE						
Protection rating	IP 20						
Manufacturing	ISO 9001:2008, ISO 14001:2004, OHSAS18001						
Weight, dimensions							
Cabinet type	A or B	A or B	A or B	B or C	C	C	C
Weight	60 or 88 kg	62 or 90 kg	64 or 92 kg	94 or 135 kg	145 kg	150 kg	155 kg
Dimensions	345 × 720 × 710	345 × 720 × 710	345 × 720 × 710	345 × 1045 × 710	440 × 1400 × 910	440 × 1400 × 910	440 × 1400 × 910
w × h × d (mm)	or	or	or	or			
	345 × 1045 × 710	345 × 1045 × 710	345 × 1045 × 710	440 × 1400 × 910			

Contact us

www.abb.com/ups

© Copyright 2016 ABB. All rights reserved.
Specifications subject to change without notice.



4NWP102349R0001