



LOCAL AREA NETWORKS (LAN)



SERVERS



DATA CENTERS



CASH REGISTERS



TELECOMMUNICATION DEVICES



INDUSTRIAL PLCs



EMERGENCY DEVICES (Lights/Alarms)

Premium Dual

1000-3000 VA single-phase

Premium Dual 1000-3000 VA



PREMIUM DUAL is the high density version of the Premium Pro range of double-conversion on-line UPS. **PREMIUM DUAL** is designed to power critical loads such as servers, storage systems, telephone equipment, medical systems and industrial applications. The UPS is ideal for Blade servers with an input power factor close to Unity (1). The UPS has can be used as tower UPS or within a rackmount cabinet, and takes up only 2U in height.

PREMIUM DUAL has a modern design, choice of functional formats, and represents the state-of-the-art technology from the Riello UPS research & development team. The UPS can achieve an on-line operating efficiency of 92%.

1. Remove the synoptic panel



2. Rotate the synoptic panel and insert it in position



3. Rotate the UPS by 90°



4. Couple the rack supports



For critical business continuity applications requiring long runtimes, Premium Dual can be installed with battery extension packs (ER models) with their own internal battery chargers to maintain sensible recharge times.

The UPS also incorporates the Riello UPS 'power-off' function found in other ECO Line UPS. **PREMIUM DUAL** is designed to save energy when no loads are connected.

SIMPLIFIED INSTALLATION

- Tower or Rackmount UPS: Premium Dual can be installed as tower or 19" rackmount UPS, with a front mimic panel that can be turned through 90° to suit the installation.
- Noise Free Operation (<40dBA): the UPS can be installed in any environment thanks to its PWM digitally-controlled high frequency inverter.
- High Temperature Operation: UPS components are sized for high temperature operation up to 40°C and are not therefore stressed during normal operational environments.
- EnergyShare: Premium Dual output sockets can be programmed to disconnect less critical loads when the mains power fails.

REDUCED MANAGEMENT COSTS

PREMIUM DUAL can be programmed remotely via software or set manually from the front mimic panel to operate in a range of energy saving operating modes:

- **On Line:** maximum power protection and output voltage waveform quality
- **ECO:** to increase operating efficiency to 98% and provide line interactive protection
- **Smart Active:** with the UPS selecting automatically its operating mode - ECO or On-Line dependent upon the reliability and quality of the local mains power supply.
- **Backup:** for emergencies only with the UPS only operating when mains power fails
- **Frequency converter:** from 50 to 60Hz or 60 to 50Hz.

ADVANCED COMMUNICATION

Premium Dual offers maximum flexibility for integrations with any communication system.

- Multiplatform communication for all operating systems and network environments, Powershield³ supervision and shut-down software included for Windows 7, 2008, Vista, 2003, XP, Linux, Mac OS X, Sun Solaris and VMware ESX operating systems and other Unix operating systems.
- UPS Tools configuration and personalisation software supplied as standard.
- RS232 serial port and opto-isolated contacts.
- USB port
- Slot for communication cards such as Modbus/Jbus, TCP/IP, SNMP and relay contacts.

HIGH OUTPUT VOLTAGE QUALITY

- Even with distorting loads (IT loads with a crest factor of up to 3:1).
- High short circuit current on bypass.
- High overload capacity: 150% from inverter (even with no mains power).
- Filtered, stabilised, reliable (On Line double conversion technology (VFI in accordance with EN62040-2 class C1) standard with filters to

suppress atmospheric disturbances.

- Load power factor correction: incoming UPS power factor close to 1 and sinusoidal current absorption.

HIGH LEVELS OF BATTERY RELIABILITY

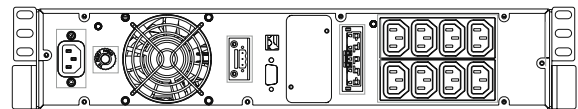
- Automatic and manual battery tests
- Batteries are 'hot-swappable' and user replaceable.
- Unlimited battery runtime extension using battery extension packs.

OTHER FEATURES

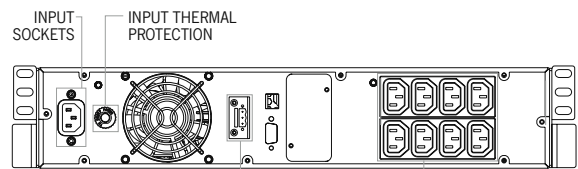
- Output voltage can be selected using software (220-230-240V).
- Auto-restart when mains power returns (programmed via software)
- Stand-by on Bypass: when the machine is switched off, it automatically goes into bypass operation with batteries charging.
- Power-Off with zero load connected to save energy
- Low battery warning
- Power-on delay
- Full microprocessor control.
- Automatic bypass without interruption
- Status, measurements and alarms available on the front panel mimic panel and LCD
- UPS firmware upgrade via PC platform
- Input protection including a user reset thermal switch (up to 1500VA)
- Back-feed protection
- Manual option to switch to bypass.

2-YEAR WARRANTY

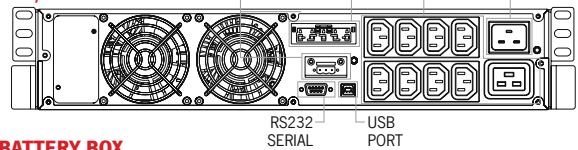
PRD 100



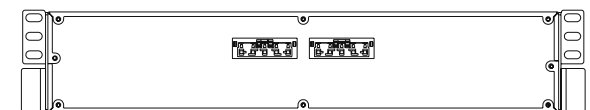
PRD 150



PRD 220/220ER 300/300 ER



BATTERY BOX

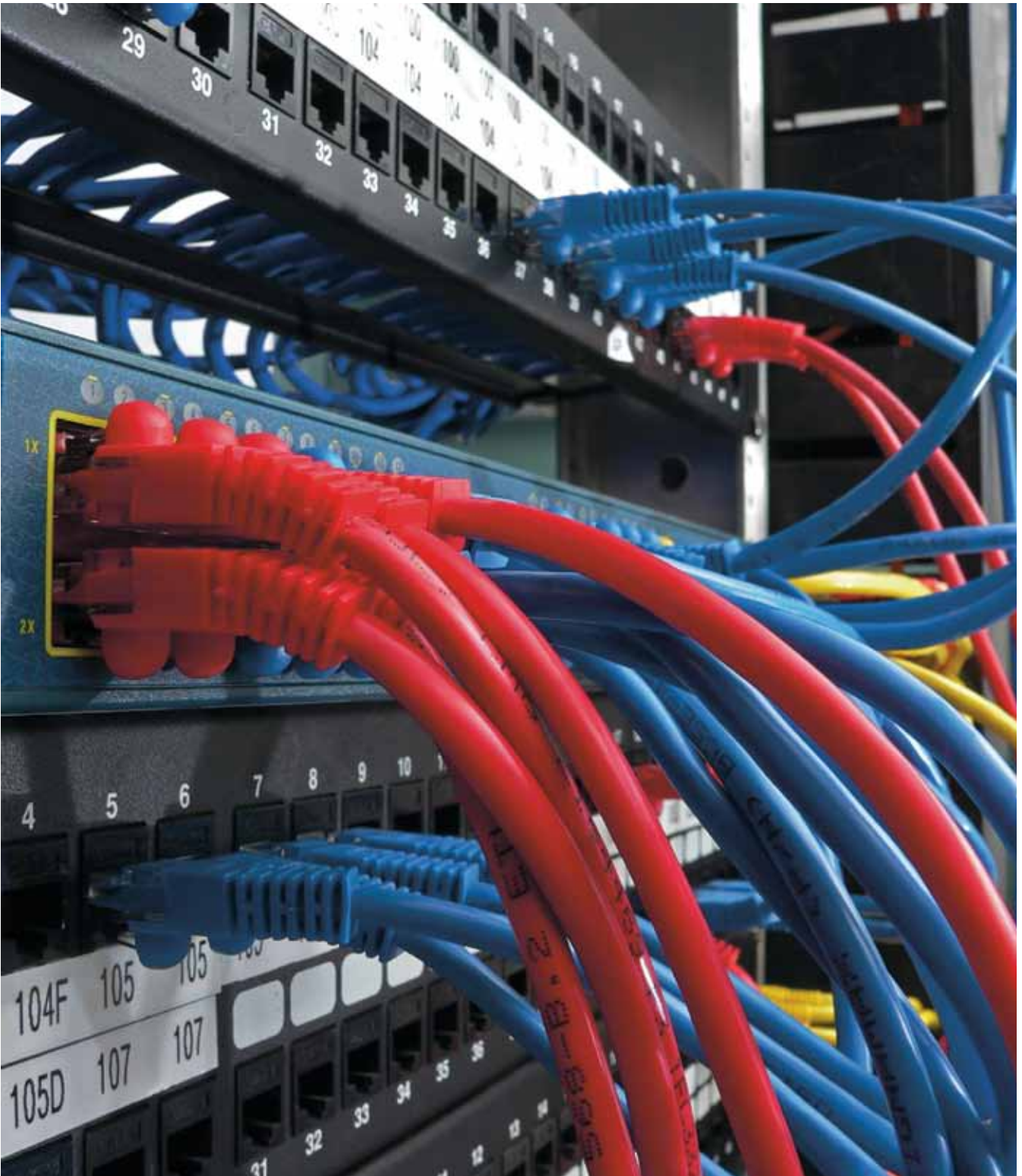


TECHNICAL DETAILS



MODELS	PRD 100	PRD 150	PRD 220	PRD 220 ER	PRD 300	PRD 300 ER
POWER	1000VA/900W	1500VA/1350W	2200VA/1980W	2200VA/1760W	3000VA/2700W	3000VA/2400W
INPUT						
Nominal voltage	220-230-240 Vac					
Voltage range for no battery intervention	140 Vac < Vin < 276 Vac @50% LOAD / 184 Vac < Vin < 276 Vac @ 100% LOAD					
Maximum permitted voltage	300 V					
Nominal frequency	50/60 Hz ±5Hz					
Frequency range	50 Hz ± 5% / 60 Hz ± 5%					
Power factor	> 0.98					
Current distortion	≤7%					
BY PASS						
Voltage tolerance	200 - 253 Vac					
Frequency tolerance	Frequency selected (from ±0.Hz to ±5Hz configurable)					
OUTPUT						
Voltage distortion with linear load/with distorting load	< 2% / < 4%					
Frequency	Can be selected: 50 Hz or 60 Hz or self-learning					
Static variation	±1%					
Dynamic variation	≤5% in 20 msec					
Waveform	Sinewave					
Current crest factor	3 : 1					
On Line / ECO Mode and Smart Active efficiency	98%					
BATTERIES						
Type	VRLA AGM lead, maintenance-free					
Charging time	2-4 hours					
OVERLOAD TIMES						
100% < Load < 110%	1 minute					
110% < Load < 150%	4 seconds					
Load > 150%	0,5 seconds					
ENVIRONMENTAL						
Net weight (kg)	17.5	18	30.5	15	31	15
Gross weight (kg)	21	21.5	35	19.5	35.5	19.5
Dimensions (hwd) (mm)	87x425x450 (2Ux425x19")			87x625x450 (2Ux625x19")		
Packaging dimensions (hwd) (mm)	550x600x245			600x760x245		
Protection against overvoltages	300 joules					
Protection devices	Overcurrent - short circuit - overvoltage - undervoltage - circuit breaker - excessively low battery					
Communication	USB / DB9 with RS232 and contacts / Slot for communication interface					
Standards	Safety: EN 62040-1 and Directive 2006/95/EC; EMC: EN 620040-2 category C2 and Directive 2004/108/EC					
Ambient temperature	0°C / +40°C					
Relative humidity	< 95% not condensed					
Colour	Black					
Noise level	< 40 dBA @ 1 m					
Standard equipment	Power cable, serial cable, USB cable, safety manual, quick start, software on CD-ROM					

N.B.: Consult us for the availability



BATTERY BOX MODELS	BB 36-A3-A BB 36-M1-A	BB 72-A3-A BB 42-M1-A
PRD MODELS	PRD 100	PRD 220 - 300
Dimensions (mm) h x w x d		

OPTIONS

- Universal rails for installation in rack cabinets
- Multipass 16 (mm/kg): 2U x 438 x 360 - rack version weight 6.8