



20' Containerised Resilient UPS



ONLINE

3:3 NextEnergy

THE SOLUTION

The MultiBox800 containerised solution from Constant Power Services Ltd utilises our high performance Next Energy UPS Systems to provide a reliable, clean & uninterrupted Emergency power source. A compact 20' ISO container houses an impressive 2 off 400kW UPS systems, 2 off dual string battery systems, associated switchgear, air-conditioning and general lighting/small power. The on-board switchgear design enables full operating flexibility providing either 800kW full capacity, 400kW Parallel N+1 or 400kW N+N arrangements.

SPACE OPTIMISING

The MultiBox800 helps to optimise space within the facility eliminating the need for dedicated and controlled environments within data centres and plant rooms. Simply locate the container externally to utilise internal floor space critical IT Infrastructure.

PERMANENT OR TEMPORARY

Available for both permanent installations as well as short and long term rental agreements. Renting will avoid the higher capital costs and provides peace of mind that equipment is fully monitored, maintained & inspected by Constant Power Services for a fixed monthly fee with no risk of any additional or unexpected costs. Alternatively a purchase investment can provide an effective emergency solution; conveniently deployed to various sites as and when required.

FAST AND CONVENIENT

The fully populated container is easy to transport, connect and commission for multi-site clients; even across countries. The MultiBox800 solution provides the flexibility and speed which is demanded by today's critical applications.

HIGHLIGHTS

- 800kW full capacity support
- 400kW Parallel N+1 and N+N
- Compact 20' Solution
- Simple Transport, Handling, Connection & Commissioning
- 2 off Battery Systems (BS6290pt4)
- Integrated Air Conditioning
- Integrated "Riello Connect" GSM UPS Monitoring
- UPS Fan Redundancy, Fan Failure Alarm & Load Dependant Speed Control
- High Efficiency UPS (up to 96.6%)
- Low Harmonic UPS (<3% THDi)

THE RIELLO UPS NEXTENERGY

The Riello UPS NextEnergy is the latest UPS series designed for mission critical applications as data centres, communication networks, commercial and industrial installations. The three-phase UPS offers transformer-free double conversion technology VFI SS 111, with integrated IGBT three-level design. NextEnergy is designed to offer unsurpassed performance.

Specific attention has been given to the ventilation system to ensure the highest efficiency, availability and component life. This is possible thanks to the automatic fan speed control which constantly adjusts to the specific load level, the fan failure alarm and the fan redundancy architecture.

ZERO IMPACT SOURCE & PEAK DEMAND MANAGEMENT

NextEnergy is designed with the latest technology to prevent disturbances on the mains and is able to "clean" the power from e.g. harmonics generated by non-linear loads. The input AC/DC converter is based on the IGBT rectifier design using the latest 3-level technology.

The key features are:

- Input current distortion <3%;
- Input power factor 0.99;
- Power walk-in function that ensures progressive rectifier start up;
- Start up delay function, to restart the rectifiers when mains power is restored.

MODEL	MultiBox800					
POWER	300kW	400kW	500kW	600kW	700kW	800kW
INPUT						
Input Terminals	Copper Bars for Lugged Cables					
Nominal Voltage	400Vac + Neutral+ Earth					
Voltage Range	320-480Vac@ load 100% / 240-480Vac@ load 50%					
Input Current	500A	800A	1000A	1000A	1250A	1400A
Nominal Frequency	50/60Hz (auto sensing)					
Power Factor	0.99					
Current Distortion	≤3%					
OUTPUT						
Output Terminals	Copper Bars for Lugged Cables					
Nominal Voltage	400Vac +Neutral+ Earth (configurable to 380/400/415Vac)					
Voltage Distortion	< 2% with linear load / < 3% with non-linear load					
Output Current	433A	577A	722A	866A	1010A	1155A
Overload	110% for 60 mins		125% for 10 min		150% for 1 min	
BATTERY						
4 String Autonomy (mins@25°C)	30	20	15	10	7	5
2 String Autonomy (mins@25°C)	10	5	n/a	n/a	n/a	n/a
Configuration	Single or Dual String on each UPS (load/project dependant)					
POWER MODULE						
Rating	2 off 400kW (800kW full capacity system)					
AC/AC Efficiency {% load}	95.7% (@100%)	96.2% (@75%)	96.5% (@50%)	96% (@25%)		
GENERAL						
Gross weight (kg)	11,500kgs (50% battery) 15,100kgs (100% battery)					
Dimensions (hwd) (mm)	2890 x 6060 x 2440					
Cooling	Battery Section - Air Conditioned UPS Section - Forced Air (3800m ³ /h)					
Manual Bypass	Included					
Communications	"Riello Connect" GSM Remote Monitoring Facility					
Engineers Support	Rapid Response 4hr Call Out Facility					
Operating Temperature	0-40°C					
Max Relative Humidity	90% (without condensation)					