

# Power Box



# **ECO-COMPATIBLE UPS**

Very high efficiency, providing energy savings and reducing operating costs.

## **COMPACT AND EFFICIENT**

The use of flywheels in place of conventional batteries allows for a footprint reduction of 50-75%.

#### RELIABLE AND RESILIENT MODULES

High reliability is synonymous with UPS with transformers such as the Master HP. Scalable and modular architecture (N+1) of up to 8 UPS arranged in parallel to ensure maximum reliability.

### **REDUCED RUNNING COSTS**

Reduced footprint, fast ROI and high operating efficiency with very low running

# **EASY MAINTENANCE**

A simple annual inspection accompanied by a minimum amount of preventative maintenance is all that is required to ensure optimum operation.

The PowerBoxes provide a continuous quality power supply wherever and whenever it is needed. Each PowerBox can be configured based on individual project specifications.

PowerBox is a solution in a fully equipped container that can be sent, installed and deployed in the space of a few hours. Each PowerBox contains all of the necessary switches and protective devices to deliver uninterruptible power from a combination of apparatus that includes: a Riello UPS, a flywheel energy storage system, and a diesel generator.

Master HP is one of the most flexible and efficient UPS on the market. In the event that the mains power supply fails, a conventional UPS makes use of a battery set. In this case

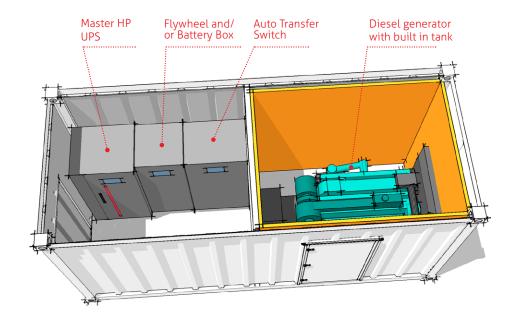
clean energy is provided from a flywheel. The uninterruptible power supplies available can be configured in modular blocks from 200 kVA to 600 KVA, which can be set up in parallel to reach up to 4 MW of clean energy. The backup time can be extended via the use of flywheels set up in parallel or by traditional battery sets (Battery Hardening). This architecture is useful for using flywheels as the first source of backup power, thus protecting batteries from unnecessary discharges.

Flywheels also provide all the advantages of an auto transfer switch, as well as the advantages of practically instantaneous recharge compared with the hours or days required to recharge conventional batteries.

### **Power Solution in Container**

Easy to move and transport, connect and power, the Riello PowerBox is a highly efficient solution ideal for:

- Modular data centres requiring modular uninterruptible power supplies
- Data centres in urban areas requiring additional power
- Public events requiring extra power for short periods
- Remote and military installations.



PowerBox is available in different combinations. Below are two examples of installations in 20 and 40-foot containers, with Riello UPS, a flywheel and a diesel generator.

| MODELS            | PowerBox 60,200,300        | PowerBox 121.500.600       |
|-------------------|----------------------------|----------------------------|
| Features          | UPS + Flywheel + Generator | UPS + Flywheel + Generator |
| UPS power         | 1 x 200 kVA                | 1 x 500 kVA                |
| Flywheel          | 1 x 300 kW                 | 1 x 600 kW                 |
| Diesel generator* | 275 kVA                    | 700 kVA                    |
| Input             | 400 A                      | 1,000 A                    |
| UPS input         | 317 A                      | 794 A                      |
| Batteries^        | Optional Battery Boxes     | Optional Battery Boxes     |
| UPS output        | 289 A                      | 724 A                      |
| Dimensions        | [WxDxH] 605 x 243 x 253    | [WxDxH] 1210 x 243 x 253   |
| Container         | 20 feet                    | 40 feet                    |
| Weight            | 8,000 kg                   | 15,000 kg                  |

Note: \* 8 hour fuel tank, optional 20 hour tank, ^ from 5-10 minutes or more to provide extra resilience







