# Z riello ups

# SuperCaps UPS



### HIGHLIGHTS

#### **EXTENDED LIFECYCLE**

Thanks to the high number of chargedischarge cycles provided by the supercapacitors (millions or more with respect to the 200 or 300 of lead batteries), the lifecycle is similar to that of a UPS, making this an eco-friendly solution.

#### **REDUCED FOOTPRINT AND WEIGHT**

1/4 size of conventional UPS.

#### **HIGH CYCLING EFFICIENCY**

Extremely low internal resistance (ESR) with consequent high cycling efficiency (95% or more) and low heat emission.

#### **HIGH TEMPERATURE RESISTANCE**

UPS SuperCaps are suitable for installation in particularly hot and cold environments without the need for air conditioning.

SuperCaps module



Riello SuperCaps UPS are designed to provide complete power supply protection for sensitive and mission-critical loads, protecting them from mains disturbances and providing sufficient power to compensate for interruptions in mains supply. SuperCaps UPS are a type of uninterruptible power supply developed by Riello UPS , which use super capacitors to accumulate energy instead of conventional batteries.

Traditionally UPS rely on batteries for accumulating energy, but at least 87% of power supply interruptions last for less than a second(1). SuperCaps UPS provide greater energy efficiency, lower costs and reduced footprints – ideal for installations where floor space is at a premium.

At the heart of the Riello SuperCaps UPS is a sophisticated control system that manages the charge-discharge cycle of the supercapacitors and optimises their lifecycle, which may exceed a million cycles. Their back-up time is dependent on the load but is sufficient to supply it until the mains power is restored or until reserve power from a generator starts automatically. Most UPS are installed as standard with batteries lasting 5-10 minutes to protect the load against generator start up failure. For modern data centres, electro-medical and industrial applications, an efficient generator set supported by a UPS with a relatively brief autonomy offers the most efficient and effective power continuity solution, with conventional batteries providing sufficient runtime to cover most power interruptions. However, SuperCaps UPS do not have batteries and therefore provide long term savings in terms of battery installation, monitoring, maintenance, replacement and recycling costs. In addition, when compared to the 5-7 year lifecycle of standard batteries, SuperCaps UPS have a theoretically infinite lifecycle. These cost savings, along with the reduced footprint make SuperCaps UPS the ideal solution for critical installations that are particularly sensitive to short power supply interruptions.

# SENTINEL**PROSC**

MODELS		SEP 700 SC	SEP 1000 SC	SEP 2200 SC					
INPUT	Nominal voltage	220-230-240 Vac 1ph							
	Nominal frequency								
	Power factor	> 0.99							
	Current distortion	≤7%							
OUTPUT	Nominal power (VA)	700	1000	2200					
	Power (W)	560	800	1780					
	Nominal voltage	220-230-240 Vac 1ph							
BACKUP	Autonomy	16 s	11 s	11 s					
	Recharge time (min)	15-30 min							
	Expandability	no	yes	yes					
DATA	Net weight (kg)	8	8,1	17,6					
	Dimensions (WxDxH) (mm)	422 x 2	446 x 333 x 190						

# SENTINEL**POWERSC**

MODELS		SPW 6000 SC	SPT 8000 SC	SPT 10000 SC				
INPUT	Nominal voltage	220-230-240 Vac 1ph 220-230-240 Vac 1ph or 380-400-415 Vac 3ph						
	Nominal frequency	50/60 Hz						
	Power factor	> 0.99 ≤5%						
	Current distortion							
OUTPUT	Nominal power (VA)	6000	8000	10000				
	Power (W)	4800	6400	8000				
	Nominal voltage	220-230-240 Vac 1ph						
BACKUP	Autonomy	11 s	9 s	7 s				
	Recharge time							
DATA	Net weight (kg)	61	62	64				
-	Dimensions (WxDxH) (mm)		785 x 615 x 282					

# MULTISENTRYSC

MODELS		MST 10 SC	MST 12 SC	MST 15 SC	MST 20 SC	MST 30 SC	MST 40 SC	MST 60 SC	MST 80 SC	MST 100 SC	MST 120 SC
INPUT	Nominal voltage	220-230-240 Vac 1ph / 380-400-415 Vac 3ph									
	Nominal frequency	50/60 Hz									
	Power factor	0.99									
	Current distortion	≤ 3%									
OUTPUT	Nominal power (VA)	10	12	15	20	30	40	60	80	100	120
	Power (W)	9	10.8	13.5	18	27	36	54	72	90	108
	Nominal voltage	220-230-240 Vac 1ph / 380-400-415 Vac 3ph									
BACKUP	Autonomy	19 s	15 s	12 s	9 s	14 s	9 s	5 s	7 s	15 s	12 s
	Recharge time	6-8 min									
DATA	Net weight (kg)	123	128	133	138	171	163	190*	200*	220*	380*
	Dimensions (WxDxH) (mm)	850 x 1320 x 440				850 x 1600 x 500 855 x 19 x 750			855 x 1900 x 750		

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\* Supercaps are not included in the UPS cabinet

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MASTER**HPSC** contact our TEC service for configurations.

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