

# SuperCaps UPS

SOLUTIONS WITH SUPERCAPS



DATACENTRE



E-MEDICAL



INDUSTRY



ONLINE



## HIGHLIGHTS

### CLEAN ENERGY

An eco-friendly, battery-free uninterruptible power system.

### HIGH EFFICIENCY INNOVATIVE TECHNOLOGY

Modular expansion options for more power and runtime.

### LONG OPERATING LIFE

5 to 10 times standard lead batteries

### HIGH NUMBER OF CYCLES

Million vs. ca 300 of lead batteries

### LOW MAINTENANCE COSTS

Easy to install and maintain.

### HIGH WORKING TEMPERATURE

No need of cooling or heating systems

### LOW FOOTPRINT & WEIGHT

SuperCaps module



SuperCaps UPS are a type of uninterruptible power supply developed by Riello UPS, which use super capacitors to accumulate energy instead of conventional batteries. Autonomy in the range of seconds (1 to 60 sec). The innovative 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<sup>(1)</sup>. 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 super-capacitors 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.

<sup>(1)</sup> Electric Power Research Institute study

## SENTINELPROSC

MODELS		SEP 700 SC	SEP 1000 SC	SEP 1500 SC	SEP 3000 SC
<b>INPUT</b>	Nominal voltage	220-230-240 Vac 1ph			
	Nominal frequency	50/60 Hz			
	Power factor	> 0,99			
	Current distortion	≤7%			
<b>OUTPUT</b>	Nominal power (VA)	700	1000	1500	3000
	Power (W)	560	800	1200	2400
	Nominal voltage	220-230-240 Vac 1ph			
<b>BACKUP</b>	<b>Autonomy</b>	<b>16 s</b>	<b>11 s</b>	<b>7 s</b>	<b>11 s</b>
	<b>Recharge time (min)</b>	<b>15-30 min</b>			
	<b>Expandability</b>	<b>no</b>	<b>yes</b>	<b>no</b>	<b>yes</b>
<b>DATA</b>	Net weight (kg)	8	8,1	9,2	17,6
	Dimensions (WxDxH) (mm)	422 x 235 x 158			446 x 333 x 190

## SENTINELPOWERSC

MODELS		SPW 6000 SC	SPT 8000 SC	SPT 10000 SC
<b>INPUT</b>	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		
	Current distortion	≤5%		
<b>OUTPUT</b>	Nominal power (VA)	6000	8000	10000
	Power (W)	4800	6400	8000
	Nominal voltage	220-230-240 Vac 1ph		
<b>BACKUP</b>	<b>Autonomy</b>	<b>11 s</b>	<b>9 s</b>	<b>7 s</b>
	<b>Recharge time</b>	<b>15-30 min</b>		
<b>DATA</b>	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
<b>INPUT</b>	Nominal voltage	220-230-240 Vac 1ph / 380-400-415 Vac 3ph + N									
	Nominal frequency	50/60 Hz									
	Power factor	0,99									
	Current distortion	≤ 3%									
<b>OUTPUT</b>	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 + N									
<b>BACKUP</b>	<b>Autonomy</b>	<b>21 s</b>	<b>17 s</b>	<b>14 s</b>	<b>10 s</b>	<b>14 s</b>	<b>9 s</b>	<b>7 s</b>	<b>15 s</b>	<b>11 s</b>	<b>20 s</b>
	<b>Recharge time</b>	<b>6-8 min</b>									
<b>DATA</b>	Net weight (kg)	123	128	133	138	163	171	190*	200*	220*	380*
	Dimensions (WxDxH) (mm)	850 x 1320 x 440						850 x 1600 x 500			855 x 1900 x 750

\* Supercaps are not included in the UPS cabinet

## MASTERHPSC

contact our TEC service for configurations.

