



SuperCaps UPS

SOLUTIONS WITH SUPERCAPS



ONLINE



1:1 1-10 kVA

3:3 10-400 kVA



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. It delivers autonomy in the range of seconds (1 to 60 sec). The innovative Riello SuperCaps UPS is 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. Traditionally UPS rely on batteries for accumulating energy, but at least 87% of power supply interruptions last for less than a second¹. 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.

¹ Electric Power Research Institute study.

SENTINELPROSC

MODELS		SEP 1000 SC	SEP 3000 SC
INPUT	Rated voltage [V]	220 / 230 /240 1ph	
	Rated frequency [Hz]	50 / 60	
	Power factor	>0.99	
	Current distortion	≤7%	
OUTPUT	Nominal power [VA]	1000	3000
	Power [W]	900	2700
	Rated voltage [V]	220 / 230 /240 1ph	
BACKUP	Autonomy [sec.]	11	11
	Recharge time [min.]	15-30	
DATA	Net weight [kg]	8.1	17.6
	Dimensions (WxDxH) [mm]	158x422x235	190x446x333

SENTINELTOWERSC

MODELS		STW 6000 SC	STW 10000 SC
INPUT	Rated voltage [V]	220 / 230 /240 1ph	220 / 230 /240 1ph or 380 / 400 / 415 3ph
	Rated frequency [Hz]	50 / 60	
	Power factor	>0.99	
	Current distortion	≤5%	
OUTPUT	Nominal power [VA]	6000	10000
	Power [W]	6000	10000
	Rated voltage [V]	220 / 230 / 240 1ph	
BACKUP	Autonomy [sec.]	10	7
	Recharge time [min.]	15-30	
DATA	Net weight [kg]	40	46
	Dimensions (WxDxH) [mm]	250x500x698	

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 125 SC	
INPUT	Rated voltage [V]	220 / 230 /240 1ph - 380 / 400 / 415 3ph + N										
	Rated frequency [Hz]	50 / 60										
	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	
	Rated voltage [V]	220 / 230 /240 1ph - 380 / 400 / 415 3ph + N										
BACKUP	Autonomy [sec.]	21	17	14	10	14	9	7	15	11	20	
	Recharge time [min.]	6-8										
DATA	Net weight [kg]	123	128	133	138	163	171	190 ¹	200 ¹	220 ¹	380 ¹	
	Dimensions (WxDxH) [mm]	850x1320x440						850x1600x500 + 960x1900x800			855x1900 x750 + 960x1900 x800	

MASTERHPSC: all models of the MASTER HP series

NXESC: all models of the NXE series

Contact our TEC service for high power or different configurations.

¹ SuperCaps are not included in the UPS cabinet.

