

Resilient & Sustainable Power Protection



centiel
continuous power availability

PremiumTower™ S2 - 400V

Empowering a resilient, sustainable future
Three-phase UPS 10-80kW





Empowering a resilient, sustainable future

PremiumTower™ S2 is Centiel's next-generation, energy-efficient, three-phase UPS solution. It is designed to help organisations protect their critical loads while reducing their carbon footprint. With the PremiumTower S2, you demonstrate your commitment to next-generation resilience and environmental goals.

Advanced performance

High reliability by design

Three independent power converters increase the system's reliability, providing power continuity even in the event of power component failure.

High charging current capability

With the ability to provide up to 5 times more charging current than a typical standalone unit, PremiumTower S2 reduces the total system cost by eliminating the need for external battery chargers.

Short circuit capability

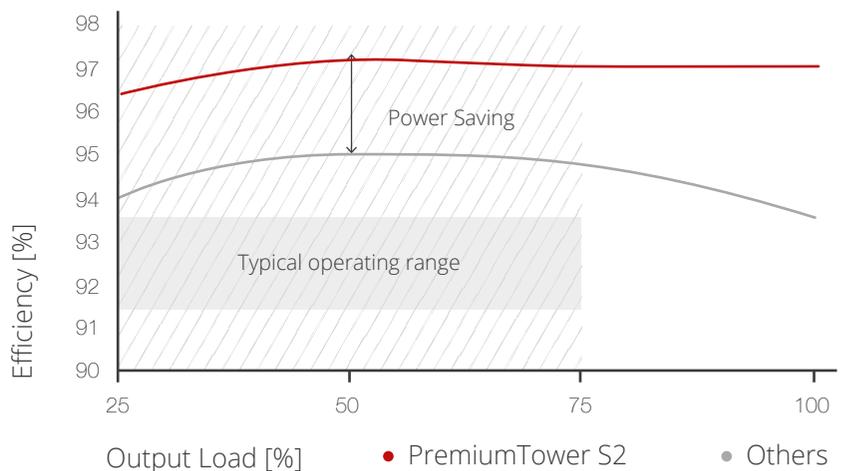
With a short circuit capability of 3 times nominal current ($3 \times I_n$), PremiumTower S2 is able to clear output circuit protection in quickly.

Class-Leading Efficiency

With an ultra-efficient architecture achieving up to 97.1% efficiency in double conversion, PremiumTower S2 pushes the boundaries of eco-sustainability.

Lower Total Cost of Ownership

Efficiency VFI up to **97.1%**



Designed to reduce waste

PremiumTower S2 features a high-efficiency architecture, delivering up to 97.1% efficiency in double conversion. Long-life components are designed to help reduce scheduled replacements, which can lower energy use, reduce heat dissipation, and help cut operating expenses. As a result, fewer resources may be consumed over the system lifecycle, helping reduce environmental impact.



Cost savings of up to **51%**
Approx. €25'300

Based on 20kW 10min autonomy. Cooling energy based on EER=3
0.219 €/kWh Euro area average
Source EUROSTAT



Maximized flexibility

Flexible battery blocks

The flexibility in the number of battery blocks (18 to 50), eliminates the need to oversize the batteries and allows system designers to optimize cost versus autonomy time.

Integrated autonomies and matching battery cabinets

Up to 240 battery blocks can be fitted in the PremiumTower S2 10 to 80 kW, reducing the total footprint and optimizing costs. For higher ratings and extended runtime, matching battery cabinets are available.

Dual or single input feed

PremiumTower S2 can be supplied with two independent AC sources to further increase the power availability of the installation.

Compatible with different battery technologies

Lead-acid, Gel, NiCd, Flywheels, Lithium and other types of energy accumulators can be used with PremiumTower S2.

18 to 50 Flexible battery blocks
LITHIUM READY

High efficiency (up to 97.1%)

Increased nominal rating (kW = KVA)

15+ years life on replaceable components

Smart-predictive fans

Backfeed protection (standard)

Higher charging current than typical standalone UPS

Up to 80kW with internal batteries

Power density up to

181 kW/mq

80 kVA

8 min

0.44 m²





Non-intrusive maintenance

Minimized maintenance and repair time contribute to maintaining the systems' high availability.

Smart-predictive fans

The PremiumTower S2 features a closed-loop control system and actively monitors fan usage and detects signs of degradation. It alerts users at exactly the right time to replace components. This helps support reliability and can reduce unnecessary maintenance.

15+ Years

Designed to deliver a service life of 15+ years for components. Beyond reliability, this longevity actively reduces waste and costs from parts replacement.

User-friendly display

The display and LED interface simplify user interaction and provide immediate visibility to the status of the UPS.

Remote monitoring

Graphical display

Compensated battery charging

Temperature probe

Generator operation mode

Auxiliary contacts

SNMP, Modbus, Modbus over IP

Slide-in adapters

5 Dry Contacts and 5 Digital Inputs

Standard

Simplified service

USB and Bluetooth app

Standard programmable input and output

Dry contacts

Tangible sustainability:

PremiumTower S2 represents a commitment to preserving natural resources, cutting operational costs, and creating a positive environmental impact. It is an investment in a future where businesses thrive while reducing their ecological footprint.



Energy efficiency

PremiumTower S2 is designed with energy efficiency in mind, using the latest technology to reduce energy consumption and minimise losses.

97.1% (VFI) efficiency

Designed to support net-zero strategies in data center operations

PremiumTower S2 is manufactured using eco-friendly materials, ensuring that our products have minimal impact on the environment.

15+ years of life on replaceable components

Sustainable by design

Centiel is continuously committed to improving our sustainability practices. We manufacture PremiumTower S2 using processes designed to help minimize environmental impact

96% of the energy used for production testing is recycled and renewable

Tower D1



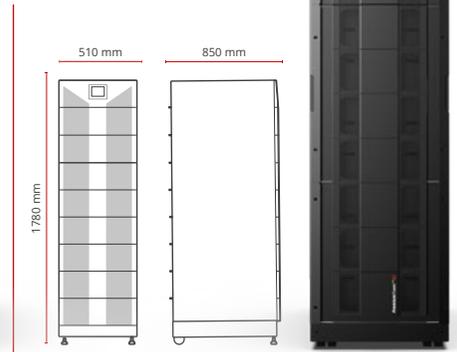
Footprint 0.29m²

Tower D0



Footprint 0.29m²

Tower E0



Footprint 0.44m²

Model	kVA/kW	Int. Batt.	Model	kVA/kW	Int. Batt.	Model	kVA/kW	Int. Batt.
UPS2-PT010-I080-D1	10	80	UPS2-PT010-I120-D0	10	120	UPS2-PT010-I240-E0	10	240
UPS2-PT020-I080-D1	20	80	UPS2-PT020-I120-D0	20	120	UPS2-PT020-I240-E0	20	240
			UPS2-PT030-I120-D0	30	120	UPS2-PT030-I240-E0	30	240
			UPS2-PT040-I120-D0	40	120	UPS2-PT040-I240-E0	40	240
			UPS2-PT060-E-D0	60		UPS2-PT060-I240-E0	60	240
			UPS2-PT080-E-D0	80		UPS2-PT080-I240-E0	80	240

PremiumTower™ S2	Cabinet Type			Internal batteries	Autonomy min	PremiumTower™ S2	Cabinet Type		Internal batteries	Autonomy min	
	D1	Do	Eo				Do	Eo			
10kVA						30kVA					
UPS2-PT010	Max 80 batteries	Do	Eo	n/a	Ext. Batt.	UPS2-PT030	Max 120 batteries	Do	Eo	n/a	Ext. Batt.
UPS2-PT010				1 x 7	11	UPS2-PT030				2 x 7	6
UPS2-PT010				1 x 9	16	UPS2-PT030				2 x 9	9
UPS2-PT010				2 x 7	28	UPS2-PT030				3 x 7	12
UPS2-PT010				2 x 9	45	UPS2-PT030				3 x 9	16
UPS2-PT010				3 x 7	52	UPS2-PT030				5 x 7	23
UPS2-PT010				3 x 9	70	UPS2-PT030				6 x 7	29
UPS2-PT010				5 x 7	91	UPS2-PT030				6 x 9	33
UPS2-PT010				5 x 9	118						
UPS2-PT010				6 x 9	153						
20kVA						40kVA					
UPS2-PT020	Max 80 batteries	Do	Eo	n/a	Ext. Batt.	UPS2-PT040	Max 120 batteries	Do	Eo	n/a	Ext. Batt.
UPS2-PT020				1 x 9	6	UPS2-PT040				2 x 9	5.5
UPS2-PT020				2 x 7	11	UPS2-PT040				3 x 7	7
UPS2-PT020				2 x 9	16	UPS2-PT040				3 x 9	11
UPS2-PT020				3 x 7	19	UPS2-PT040				5 x 7	15
UPS2-PT020				3 x 9	28	UPS2-PT040				6 x 7	20
UPS2-PT020				5 x 7	42	UPS2-PT040				6 x 9	28
UPS2-PT020				5 x 9	56						
UPS2-PT020				6 x 9	72						
						UPS2-PT060	Max 240 batteries	Do	Eo	n/a	Ext. Batt.
						UPS2-PT060				3 x 9	6
						UPS2-PT060				4 x 9	10
						UPS2-PT060				6 x 9	16
						80kVA					
						UPS2-PT080	Max 240 batteries	Do	Eo	n/a	Ext. Batt.
						UPS2-PT080				5 x 9	6
						UPS2-PT080				6 x 9	8

Autonomy based on 100% load PF 0.8

Technical Datasheet - From 10 to 80 kVA/kW



	Model	UPS2-PT010- I080-D1 UPS2-PT010- I120-Do UPS2-PT010- I240-Eo	UPS2-PT020- I080-D1 UPS2-PT020- I120-Do UPS2-PT020- I240-Eo	UPS2-PT030- I120-Do UPS2-PT030- I240-Eo	UPS2-PT040- I120-Do UPS2-PT040- I240-Eo	UPS2-PT060- E-Do UPS2-PT060- I240-Eo	UPS2-PT080- E-Do UPS2-PT080- I240-Eo	
General Data	Product name	PremiumTower™S2 UPS						
	Topology/Technology	Online double conversion						
	Max Power [kVA/kW]	10	20	30	40	60	80	
Mains	Input Wiring	3Ph+N+PE						
	Rated Voltage	380/400/415Vac						
	Voltage Range	For loads < 100% (-25%, +20%) / < 80% (-32.5%, +20%) <60% (-35%, +20%)						
	Input Frequency	30-70 Hz						
	Total Harmonic Distortion	THDi <= 1% for nominal load						
	Input Power Factor	0,99						
	Bypass	Input Wiring	3Ph+N+PE					
Rated Voltage		380/400/415 Vac						
Change over tolerance		± 30... ± 10% (Voltage) (According to VFI-SS-111)						
Input Frequency		50/60 ± 2/4% (selectable)						
Battery	Rated Voltage	216-600 Vdc (the number of batteries can be selected)						
	Type	Lead-Acid / NiCd / Lithium / Zinc / Salt / others...						
	Internal batteries (7/9Ah)	I080: 80	I120: 120	I240: 240	I120: 120	I240: 240	E: External	I240: 240
	Blocks[VRLA]	18-50						
	Charger (Amp)	15	25	35	35	60	60	
	Inverter	Output Wiring	3Ph+N+PE					
		Nominal Power [kW]	10	20	30	40	60	80
Voltage		380/400/415 Vac ± 1%						
Frequency		Tracking the bypass input (Online Mode); 50/60 Hz ± 0.1% (Battery Mode)						
Waveform		Sine wave (THDv < 1%)						
Output Power Factor		1						
Efficiency		97.1 %						
Overload Capacity		Inverter: 125% for 10 min, 150% for 60 sec Bypass: 135% for long term; <1000% for 100ms						
Short circuit capability	Up to 3xIn							
Bypass	Efficiency	99,4 %						
Environment	Operating Temperature	0-40°C						
	Storage Temperature	-40-70°C						
	Relative Humidity	0%-95% (No condensing)						
	Maximum Operating Altitude	1000 m. Above 1000 m, derating 1% for each additional 100 m						
Others	Dimensions (H x W x D) mm	D1 842 x 349 x 840 DO 1,077 x 349 x 840 E0 1,780 x 510 x 850		DO 1,077 x 349 x 840 E0 1,780 x 510 x 850		DO 1,077 x 349 x 913 E0 1,780 x 510 x 905		
	Weight without batteries[kg]	D1 52 D0 56 E0 120		D0 60 E0 120		D0 83 E0 144 D0 87 E0 144		
	Colour / protection level	RAL 9017 (traffic black) / IP20						
	Certifications	EN/IEC 62040-1 EN/IEC 62040-2 EN/IEC 62040-3 CE UKCA EAC RoHS						
	Communications	RS485, USB, Dry contacts, Ethernet, Bluetooth						

The information in this document is subject to change without notice and should not be construed as a commitment by Centiel S.A.
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