

# Resilient & Sustainable Power Protection



**centiel**  
continuous power availability

**Premium Tower™ S2 - 400V**

Empowering a Resilient Sustainable Future  
Three-phase UPS 10-80kW





# Empowering a Resilient Sustainable Future

**PremiumTower™ S2** is Centiel's next-generation of resilient eco-responsible three-phase UPS solution, crafted to help organizations protect their critical loads while actively reducing their carbon footprint. With PremiumTower™ S2, you demonstrate a commitment to both cutting-edge resilience and planetary well-being.

## Advanced Performance

### High reliability by design

Three independent power converters increase system reliability and provide power continuity even in cases of power component failure.

### Market leading charging current

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

### Short circuit capability

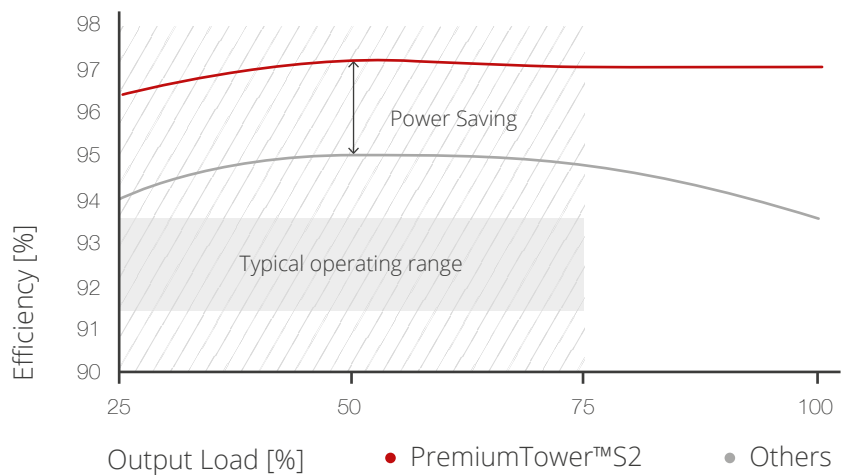
With a Short Circuit capability of 3 times nominal current ( $3 \times I_n$ ), PremiumTower™ S2 is able to clear output circuit protection in milliseconds.

### Class-Leading Efficiency

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

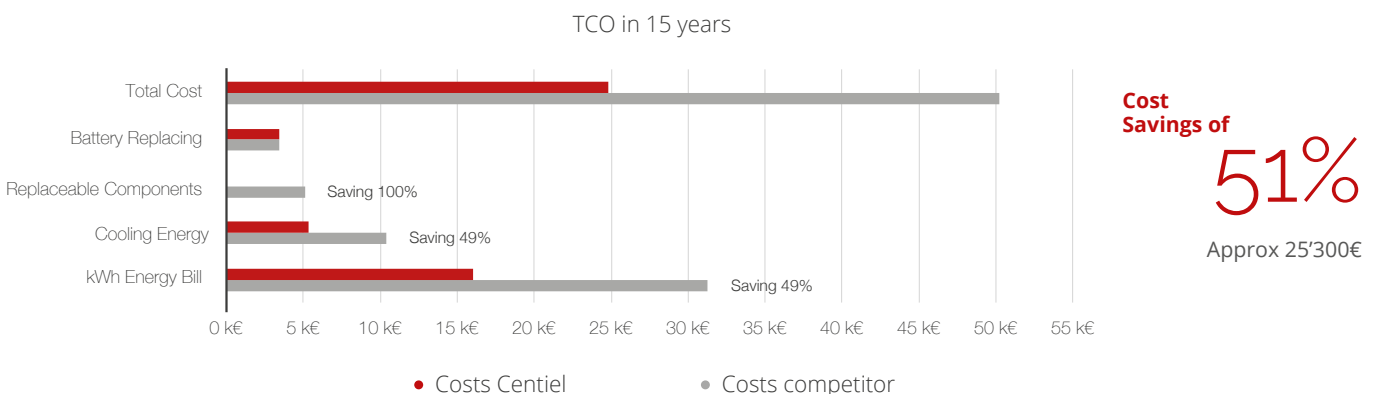
## Lowest Total Cost of Ownership

Efficiency VFI  
Up to **97.1%**



### Zero waste for a Greener Planet

PremiumTower™ S2 market leading ultra-efficient architecture of up to 97.1% efficiency in double conversion, and no replaceable components for 15+ years reduce the energy consumption, lowering heat dissipation and cutting operating expenses. As a result, fewer resources are needed further shrinking your environmental impact.



Cost Savings of **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**

Unbeatable Efficiency 97.1%

Increased nominal rating  
(kW = KVA)

15+ years life on replaceable components

Smart-predictive fans

Backfeed Protection  
(Standard)

500% 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 m<sup>2</sup>





# Non-intrusive maintenance

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

## Smart-Predictive Fans

With its closed-loop control system PremiumTower™ S2 actively monitors fans usage and detect signs of degradation alerting users at exactly the right time to replace components, ensuring ongoing reliability and eliminating unnecessary maintenance costs.

## 15+ Years

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

## User-friendly display

The display and LED interface simplifying user interaction give 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 adaptors

### 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 means supporting a commitment to preserve natural resources, cut operational costs, and create 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

### Zero waste

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

### Net zero by design

Centiel is continuously committed to improving our sustainability practices, and we manufacture PremiumTower™ S2 using environmentally friendly processes to minimize our impact on the environment.

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

# Tower D1



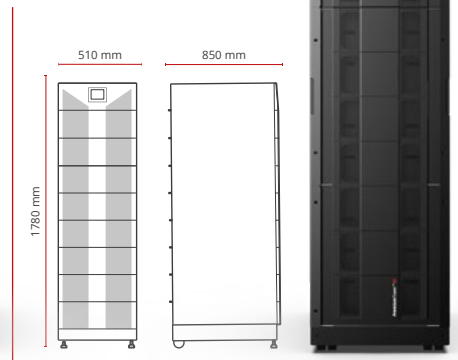
Footprint 0.29m<sup>2</sup>

# Tower D0



Footprint 0.29m<sup>2</sup>

# Tower E0



Footprint 0.44m<sup>2</sup>

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			
<b>10kVA</b>						<b>30kVA</b>					
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						
<b>20kVA</b>						<b>40kVA</b>					
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
						<b>80kVA</b>					
						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 @100% load PF 0.8



Model	UPS2-PT010- I080-D1 UPS2-PT010- I120-D0 UPS2-PT010- I240-E0	UPS2-PT020- I080-D1 UPS2-PT020- I120-D0 UPS2-PT020- I240-E0	UPS2-PT030- I120-D0 UPS2-PT030- I240-E0	UPS2-PT040- I120-D0 UPS2-PT040- I240-E0	UPS2-PT060- E-D0 UPS2-PT060- I240-E0	UPS2-PT080- E-D0 UPS2-PT080- I240-E0	
<b>General Data</b>	Product name	PremiumTower™S2 UPS					
	Topology/Technology	Online double conversion					
	Max Power [kVA/kW]	10	20	30	40	60	80
<b>Mains</b>	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					
	<b>Input</b>	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)					
<b>Battery</b>	Rated Voltage	216-600 Vdc (the number of batteries can be selected)					
	Type	Lead-Acid / NiCad / Lithium / Zink / Salt / others...					
	Internal batteries (7/9Ah)	I080: 80	I120: 120	I240: 240	I120: 120	I240: 240	E: External   I240: 240
	Blocks[VRLA]	<b>18-50</b>					
<b>Output</b>	Charger (Amp)	<b>15</b>	<b>25</b>	<b>35</b>	<b>35</b>	<b>60</b>	<b>60</b>
	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	<b>97.1 %</b>					
	Overload Capacity	<b>Inverter:</b> 125% for 10 min, 150% for 60 sec <b>Bypass:</b> 135% for long term; <1000% for 100ms					
	Short circuit capability	<b>Up to 3xIn</b>					
<b>Bypass</b>	Efficiency	<b>99,4 %</b>					
	<b>Environment</b>	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					
<b>Others</b>	Dimensions (H x W x D) mm	<b>D1</b> 842 x 349 x 840 <b>D0</b> 1,077 x 349 x 840 <b>E0</b> 1,780 x 510 x 850		<b>D0</b> 1,077 x 349 x 840 <b>E0</b> 1,780 x 510 x 850		<b>D0</b> 1,077 x 349 x 913 <b>E0</b> 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.  
TDS\_Rev01-CW\_Rev01

