

# Resilient & Sustainable Power Protection



**centiel**  
*continuous power availability*

## PremiumTower™ S2

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

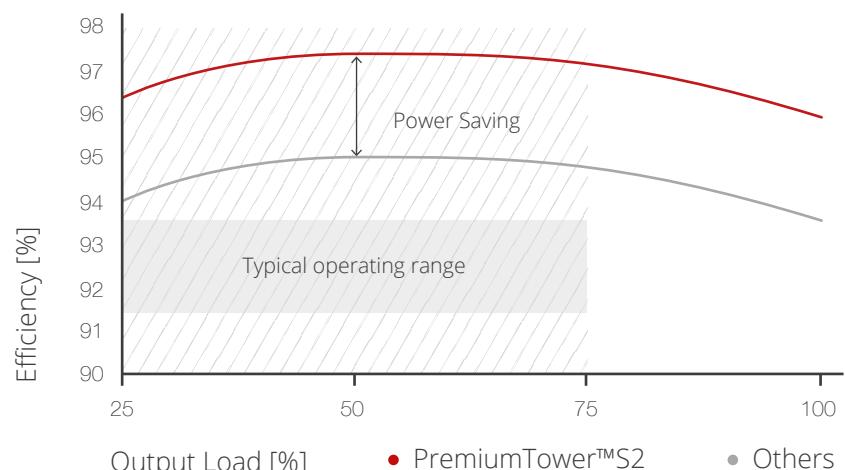
With a Short Circuit capability of 3 times nominal current ( $3 \times I_n$ ), PremiumTower™ S2 is able to clear output circuit protection in milliseconds.

### 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.

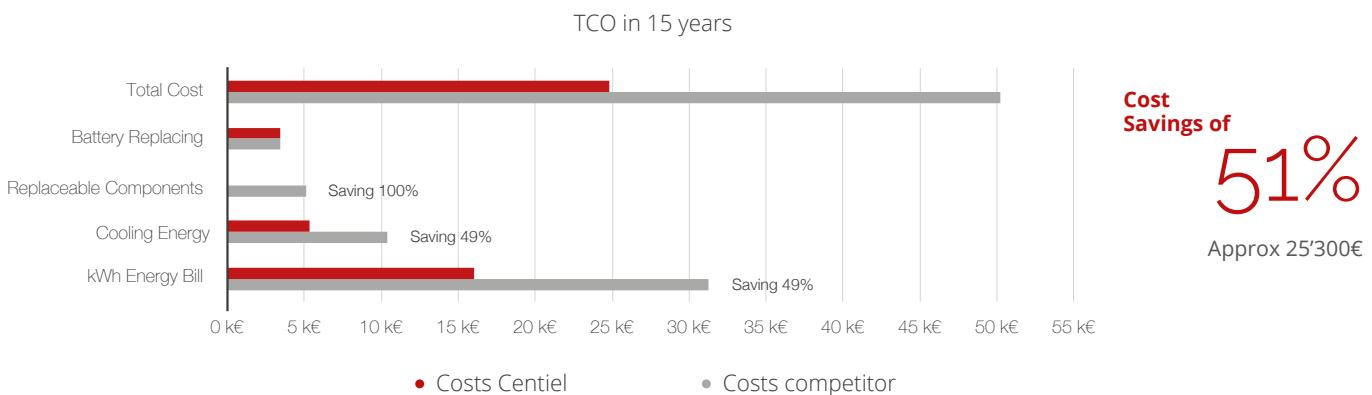
## Lowest Total Cost of Ownership

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.



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 (17 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.

17 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/m<sup>2</sup>

80 kVA

8 min

0.44 m<sup>2</sup>

## 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.



# 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.

## User-friendly display

The display and LED interface simplifying user interaction give immediate visibility to the status of the UPS.

### Remote monitoring

Graphical display

### Generator operation mode

Auxiliary contacts

### 5 Dry Contacts and 5 Digital Inputs

Standard

### Standard programmable input and output

Dry contacts

## 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.

### Compensated battery charging

Temperature probe

### SNMP, Modbus, ModBus over IP

Slide-in adaptors

### Simplified service

USB and Bluetooth app

## 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.

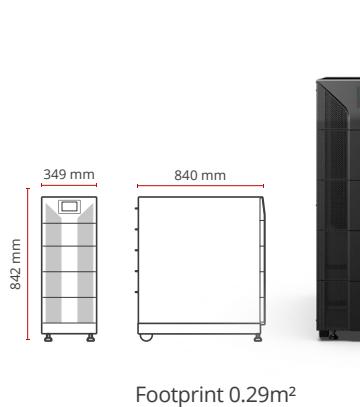
15+ years of life on replaceable components

### 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

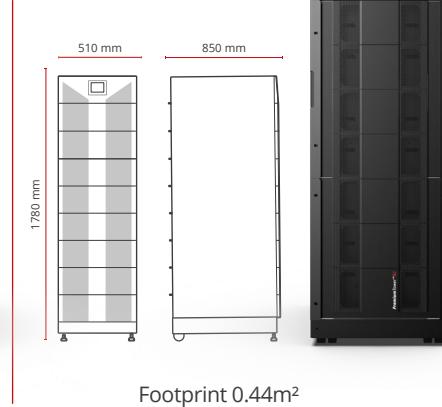
Tower D1



Tower Do



Tower Eo



Model	kVA/kW	Int. Batt.
UPS2-PT010-I080-D1	10	80
UPS2-PT020-I080-D1	20	80

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

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

PremiumTower™ S2	Cabinet Type			Internal batteries	Autonomy min
10kVA	D1	Do	Eo		
UPS2-PT010		n/a		Ext. Batt.	-
UPS2-PT010				1 x 7	11
UPS2-PT010				1 x 9	16
UPS2-PT010				2 x 7	28
UPS2-PT010				2 x 9	45
UPS2-PT010				3 x 7	52
UPS2-PT010				3 x 9	70
UPS2-PT010				5 x 7	91
UPS2-PT010				5 x 9	118
UPS2-PT010				6 x 9	153
20kVA	D1	Do	Eo		
UPS2-PT020		n/a		Ext. Batt.	-
UPS2-PT020				1 x 9	6
UPS2-PT020				2 x 7	11
UPS2-PT020				2 x 9	16
UPS2-PT020				3 x 7	19
UPS2-PT020				3 x 9	28
UPS2-PT020				5 x 7	42
UPS2-PT020				5 x 9	56
UPS2-PT020				6 x 9	72

PremiumTower™ S2	Cabinet Type			Internal batteries	Autonomy min
30kVA	Do	Eo			
UPS2-PT030		n/a		Ext. Batt.	-
UPS2-PT030				2 x 7	6
UPS2-PT030				2 x 9	9
UPS2-PT030				3 x 7	12
UPS2-PT030				3 x 9	16
UPS2-PT030				5 x 7	23
UPS2-PT030				6 x 7	29
UPS2-PT030				6 x 9	33
40kVA	Do	Eo			
UPS2-PT040		n/a		Ext. Batt.	-
UPS2-PT040				2 x 9	5.5
UPS2-PT040				3 x 7	7
UPS2-PT040				3 x 9	11
UPS2-PT040				5 x 7	15
UPS2-PT040				6 x 7	20
UPS2-PT040				6 x 9	28
60kVA	Do	Eo			
UPS2-PT060		n/a		Ext. Batt.	-
UPS2-PT060				3 x 9	6
UPS2-PT060				4 x 9	10
UPS2-PT060				6 x 9	16
80kVA	Do	Eo			
UPS2-PT080		n/a		Ext. Batt.	-
UPS2-PT080				5 x 9	6
UPS2-PT080				6 x 9	8

Autonomy based @100% load PF 0.8

# Technical Datasheet - From 10 to 80 kVA/kW

	UPS2-PT010-I080-D1	UPS2-PT020-I080-D1	UPS2-PT030-I120-Do	UPS2-PT040-I120-Do	UPS2-PT060-E-Do	UPS2-PT080-E-Do
General Data	Product name	PremiumTower™S2 UPS				
Mains	Topology/Technology	Online double conversion				
	Max Power [kVA/kW]	10   20   30   40   60   80				
Bypass	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				
Battery	Input Wiring	3Ph+N+PE				
	Rated Voltage	204-600 Vdc (the number of batteries can be selected)   276-600 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>17-50</b>   <b>23-50</b>				
	Charger (Amp)	<b>20</b>   <b>20</b>   <b>30</b>   <b>30</b>   <b>30</b>   <b>40</b>				
Output	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)				
Inverter	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>				
Bypass	Efficiency	<b>99,4 %</b>				
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	<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 67   D0 75   E0 120   D0 75   E0 120   D0 97   E0 177				
	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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