EN

www.centiel.com

Resilient & Sustainable Power Protection

centiel
continuous power availability

PremiumTower™ S2 - 400V

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

SWISS MADE

Green UPS

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

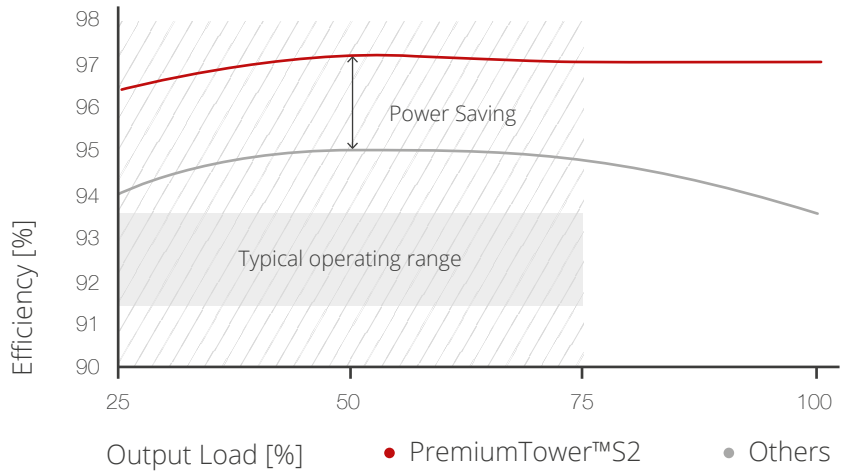
With a Short Circuit capability of 3 times nominal current (3 x In), PremiumTower™ S2 is able to clear output circuit protection in milliseconds.

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.

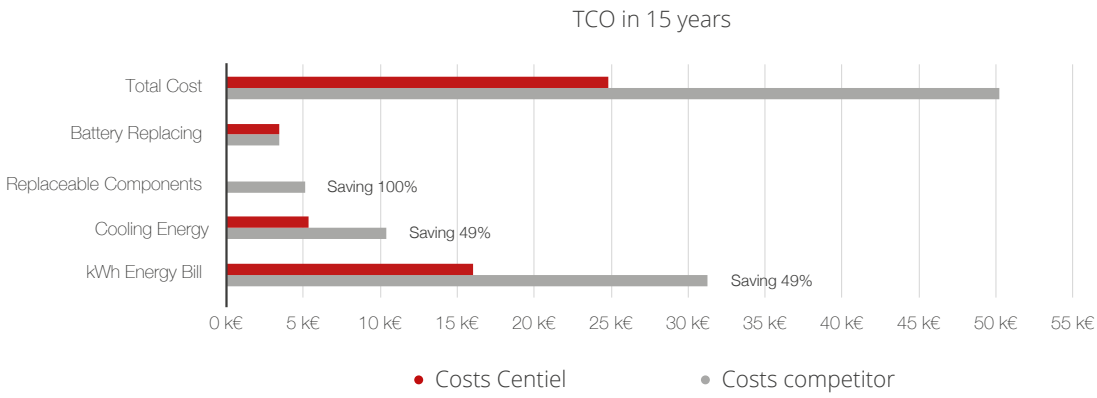
Lowest Total Cost of Ownership

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 m²

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.

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.

Remote monitoring
Graphical display

Generator operation mode
Auxiliary contacts

5 Dry Contacts and 5 Digital Inputs
Standard

Standard programmable input and output
Dry contacts

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.

Green UPS

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.

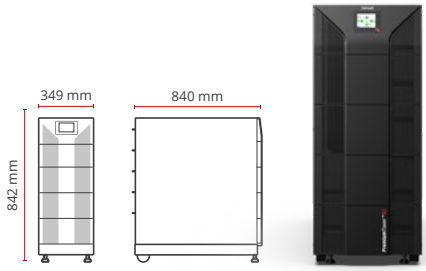
15+ years of life on replaceable components

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

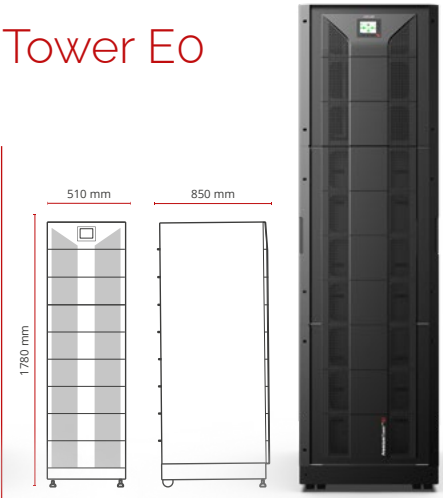


Footprint 0.29m²

Tower Do

Footprint 0.29m²

Tower Eo



Footprint 0.44m²

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	Max 80 batteries	Max 120 batteries	n/a	Ext. Batt.	-
UPS2-PT010			Max 240 batteries	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	Max 80 bat-teries	Max 120 batteries	n/a	Ext. Batt.	-
UPS2-PT020			Max 240 batteries	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	Max 120 batteries	n/a	Ext. Batt.	-
UPS2-PT030		Max 240 batteries	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	Max 120 batteries	n/a	Ext. Batt.	-
UPS2-PT040		Max 240 batteries	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		Max 240 batteries	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		Max 240 batteries	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

		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
General Data		Product name	PremiumTower™S2 UPS					
		Topology/Technology	Online double conversion					
		Max Power [kVA/kW]	10	20	30	40	60	80
Input	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 / 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]	**18-50**					
		Charger (Amp)	**15**	**25**	**35**	**35**	**60**	**60**
Output	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 **D0** 1,077 x 349 x 840 **E0** 1,780 x 510 x 850		**D0** 1,077 x 349 x 840 **E0** 1,780 x 510 x 850		**D0** 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.

TDS_Rev01-CW_Rev01