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, eco-responsible, 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 cutting-edge resilience and planetary well-being.

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.

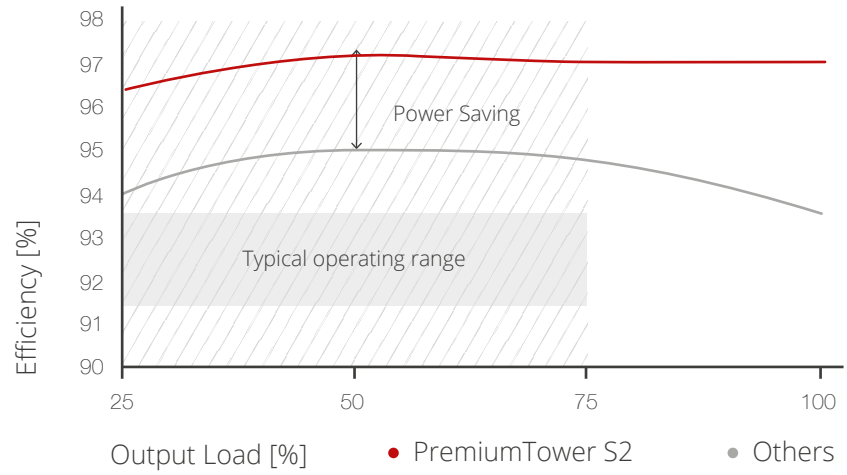
Market leading charging current
With the ability to provide up to 5 times more charging current than t a typical standalone unit, PremiumTower S2 reduces the total system cost by eliminating the need for external battery chargers.

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

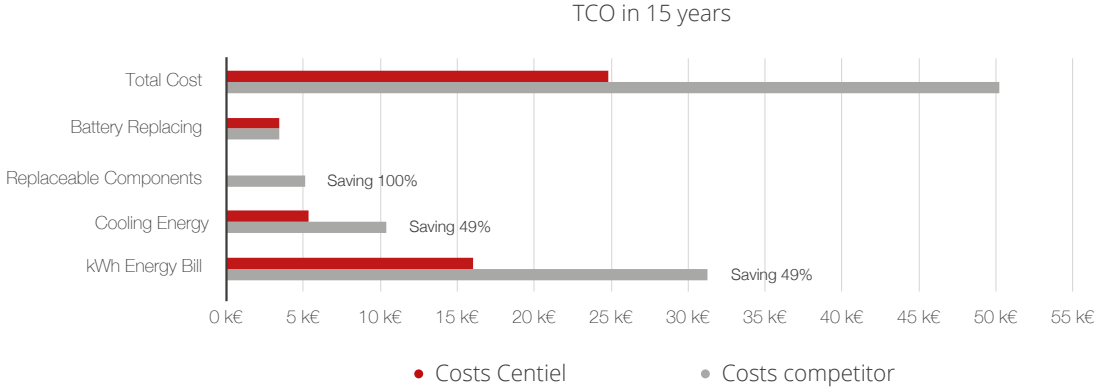
Class-Leading Efficiency
With an ultra-efficient architecture achieving up to 97.1% efficiency in double conversion, PremiumTower S2 pushes the boundaries of eco-sustainability.

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 consumed, which in turn reduces 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

- **Industry-leading 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 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 ensures ongoing reliability and eliminates 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 for 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 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.

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.

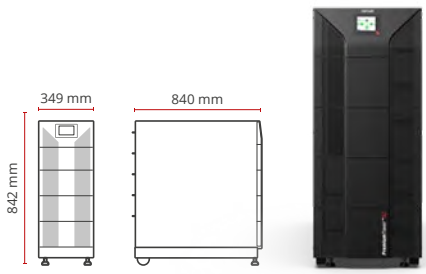
15+ years of life on replaceable components

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

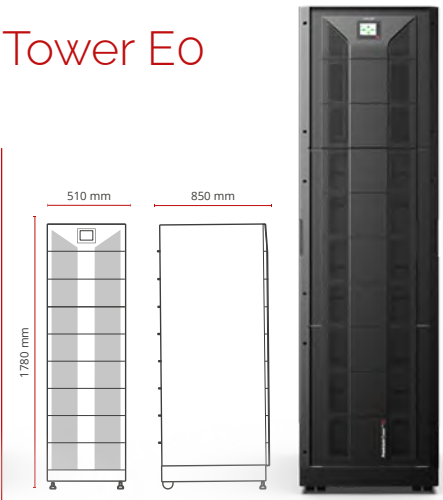
Model	kVA/kW	Int. Batt.
UPS2-PT010-I080-D1	10	80
UPS2-PT020-I080-D1	20	80

Tower Do

Footprint 0.29m²

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	

Tower Eo



Footprint 0.44m²

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 batteries	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					

TDS_Rev01-CW_Rev01