## Designed with the future in mind











### StratusPower™ The ultimate UPS for net-zero data centers

StratusPower is an innovative uninterruptible power supply (UPS), specifically designed to meet the rigorous demands of today's IT infrastructure.

Designed and manufactured in Switzerland, StratusPower's superior topology, referred to as DARA, ensures full availability with **no single point of failure**, providing data center operators with complete peace of mind. Furthermore, installation of StratusPower is straightforward and maintenance is simple and non-intrusive.

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**StratusPower™** 

Minimize your total cost of ownership while achieving the highest levels of availability and reliability for your data center.







**99.9999999 % availability** No single point of failure

Fully redundant DARA - fault-tolerant architecture

From 50 kW - 3.75 MW In cabinets from 375 kW to 1.5 MW



# 97,6% VFI efficiency Reliable semiconductor technology

### Non-intrusive maintenance

15+ years caps and smart fans

Smart energy peak-shaving, self-test

**714** kW/m<sup>2</sup> space-saving footprint

#### Fully connected

multi-protocol and a full range of communication channels available

## DARA Take your power availability to the next level

#### When it comes to availability, it's what's inside that counts

and interconnected. Each module is a complete UPS system in its own right, with three independent power converters, a static bypass and all the hardware devices needed to safely isolate a fault without impacting the load. This maximizes the mean time between failures (MTBF) and safeguards the power to your critical applications.

With DARA, each UPS module is independent, redundant DARA's Distributed Decision Making technology, referred to as DDM<sup>™</sup>, elevates redundancy by enabling collaborative decision-making among all modules. This ensures the continuous power supply to your load, even during crucial decision-making moments. With DDM, the UPS can make distributed decisions, eliminating the single point of failure typically associated with masterslave technology. As a result, downtime is minimized, and critical loads remain protected.

### Maximized availability at module, frame and system level



### Mean time to repair (MTTR)

DARA's technology on the frame level has been designed to accommodate **non-intrusive maintenance** and to minimize mean time to repair (MTTR), ensuring that any downtime is kept to an absolute minimum. For example, in the event of a power failure, frontal access to components avoids the need for removing modules, thereby reducing the risk of human error.





# Unveiling the power of StratusPower

At Centiel, we understand our customers' pain points and have designed the StratusPower with availability and sustainability as major considerations. With StratusPower, we guarantee peace of mind by knowing that your critical infrastructure is protected by the most advanced UPS technology.

### The future-ready UPS





#### Advanced computing power Multi-core Trigonometric math unit Control law accelerator Parallel processing IEEE 754 double-precision math



#### 100+ Measuring points At the module level



**External ambient** monitoring Temperature Humidity Hydrogen Water leak



Cybersecure connection Compliant IEC-4-62443-2

#### **StratusPower**<sup>™</sup>

### Advanced energy management

StratusPower provides **peak-shaving capabilities** to help businesses manage electricity usage and reduce costs. By utilizing StratusPower's peak-shaving feature,



### With the future in mind

StratusPower is **future-ready** and can connect to a variety of power generation sources. It is equipped to provide grid support and manage energy efficiently based on the specific requirements of each application.





businesses can reduce their energy consumption during peak hours when electricity rates are typically at their highest. This results in significant cost savings.

### StratusPower's peak-shaving capabilities

At times of peak consumption, grid operators may charge higher prices for their power. To minimize costs for the user, a portion of the energy stored locally in the UPS can be utilized during these times, thereby reducing the amount drawn from the grid.

The UPS batteries can then be recharged with power from off-peak hour.

> Power demand





DC Flex echnology

Our unique DCFlex© technology offers unparalleled flexibility when it comes to battery storage installation and configuration, as well as preparing the infrastructure to manage both current and future energy sources. Our UPS solution is compatible with various battery storage devices, allowing you to reuse the DC supply or to choose the option that best suits your needs and budget.

The StratusPower battery charging current capability is 500 percent higher than our closest competitors, meaning **faster charging times** and more **efficient use** of your batteries.





Predictive and remote health monitoring

This not only saves time and effort but also improves your system's overall reliability and safety. With its computing capabilities and more than 100 measurement points, StratusPower does the work for you, ensuring that maintenance is performed promptly and accurately.

Bluetooth connectivity allows technicians for easy, non-intrusive monitoring via mobile devices, with the Centiel app providing real-time status updates and alerts.

StratusPower provides advanced cybersecurity features in compliance with IEC-4-62443-2, making certain that your critical data and systems are protected from cyber threats.



Robust and reliable semiconductor technology

The StratusPower also boasts a robust and reliable design, including a proprietary technology for inverter physical isolation in case of IGBT failure, ensuring maximum uptime for your critical infrastructure.

The triple-mode parallel bus provides an extra layer of redundancy, eliminating any single point of failure in communication between frames and modules.

At Centiel, we take reliability very seriously. That's why we designed our technology with extra-safe power of 24%, ensuring a higher level of reliability and redundancy. Even if a redundant module fails, our advanced technology guarantees no single point of failure. With a continuous module operation capacity of 75 kW, the 750 kW StratusPower UPS transforms into a 900 kW powerhouse. Our UPS solution is compatible with various battery storage devices, allowing you to reuse the DC supply or to choose the option that best suits your needs and budget.





With a THDi of less than 1 percent, the StratusPower provides an excellent performance that exceeds regulatory requirements.

The UPS is capable of handling 125% overload for 15 minutes and 150% overload for 2 minutes, ensuring uninterrupted power delivery during peak demand scenario.

A short circuit capability above 3xIn safeguards your equipment and system integrity despite electrical faults.

### Tangible sustainability: We help your data center achieve CO<sub>2</sub> emissions targets through our solutions and services.

#### **Energy efficiency**

StratusPower is designed with energy efficiency in mind, using the latest technology to reduce energy consumption and minimize losses.

#### Zero waste

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

#### Net zero by design

Our company is continuously committed to improving our sustainability practices, and we manufacture StratusPower using environmentally friendly processes to minimize our impact on the environment.



97.6% (VFI) efficiency

30<sup>+</sup> years of UPS design life  $15^+$  years of life on replaceable components

95% of the energy used for production testing is recycled

# Powering flexibility The scalable solution

Up to 1.5 MW per frame



Model	
Modules	
Nom. power /cabinet	
Dimensions h x w x d (mm)	
Footprint	



CAB-SP375(B/T)-E-K Up to 6 x SM50/62 375 kW 1982 x 656 x 900 0.59 m<sup>2</sup>

CAB-SP750(B/T)-E-2K
Up to 12 x SM50/62
750 kW
1982 x 1312 x 900
$1.2 m^2$



Model	CAB-SP1125(B/T)-E-3K
Modules	Up to 18 x SM50/62
Nom. power /cabinet	1,125 kW
Dimensions h x w x d (mm)	1982 x 1968 x 900
Footprint	1.77 m <sup>2</sup>



CAB-SP1500(B/T)-E-4K	
Up to 24 x SM50/62	
1,500 kW	
1982 x 2624 x 900	
1.86 m <sup>2</sup>	

Scalability up to 3.75 MW

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#### **StratusPower**<sup>™</sup>

### Technical Datasheet

#### CAB-SP375B-E-Model CAB-SP375T-E-SM50 / SM62 Module type Nom. power per module [kVA = kW] 50 / 62.5 Cont. power per module [kVA = kW] 60/75 Nom. power per frame [kVA = kW] 375 Cont. power per frame [kVA = kW] 450 Number of modules per frame 1-6 Max. power per system [kVA = kW] 3750 Online double conversion / DARA (Distributed Active Redundant Architecture) Topology / technology Input wiring 3 Ph + N + PE Rated voltage 380/400/415Vac For loads <100% (-25%, +20%), <80% (-32.5%, +20%), <60% (-35%, +20%) Voltage range Inverter Input frequency 30-70 Hz Total Harmonic Distortion THDi<0.8% for linear load, THDi<3% for nonlinear load Input power factor 0,99 Input 3 Ph + N + PE Input wiring ±30...±10% (Voltage) (According to VFI-SS-111) Rated voltage Bypass 50/60 ±2/4% (selectable) Input frequency 240 - 600 Vdc (the number of batteries can be selected ) Rated voltage Internal batteries (7/9Ah) E: External Lead-Acid / NiCad / Lithium / Zink / Salt / others.. Battery Туре 20-50 Blocks[LA] Charger (Amps per module) 50 Output wiring 3Ph+N+PE Voltage 380/400/415 Vac±1% Frequency Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode) put Inverter Output power factor OC 97,6% Efficiency Inverter: 124% continuous, 125% for 15min, 150% for 120 sec Overload capacity Bypass Efficiency 99,4% Operating temperature 0-40°C (No power derating onment Storage temperature -40-70°C Relative humidity 0%-95% (No condensing) Envire Maximum operating altitude 1000 m. above 1000 m, derating 1% for each additional 100 m 1982 x 656 x 900 1982 x 1312 x 900 1982 x 1968 x 900 1982 x 2624 x 900 Dimensions (H x W x D) [mm] Others Certifications EN/IEC 62040-1 | EN/IEC 62040-2 | EN/IEC 62040-3 | CE | UKCA | EAC | RoHS RS485, USB, Dry contacts, Ethernet, Bluetooth Communications



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-к	CAB-SP750T-E-2K	CAB-SP1125T-E-3K	CAB-SP1500T-E-4K
	SM50 / SM62	SM50 / SM62	SM50 / SM62
	50 / 62.5	50 / 62.5	50 / 62.5
	60/75	60/75	60/75
	750	1125	1500
	900	1350	1800
	1-12	1-18	1-24
	3750	3750	3750

Rev1.0 30.04. The TDS





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