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# Designed with the future in mind







Modular three-phase UPS IEC 50 kW to 3.75 MW







97,6%

**VFI efficiency**Reliable semiconductor technology



StratusPower™
The ultimate UPS for data center applications of various sizes

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StratusPower is an innovative Uninterruptible Power Supply, specifically designed to meet the rigorous demands of today's IT infrastructure.

Swiss designed and manufactured, 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.

No Single point of failure 99.9999999 % availability

Fully distributed
DARA – full redundancy

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

15 years caps and smart fans

Smart energy peak-shaving, self-test

**714 kW/m²** space-saving footprint

Fully connected

easy to read info in App, SNMP, Modbus, temperatures, alarms and full range of options available

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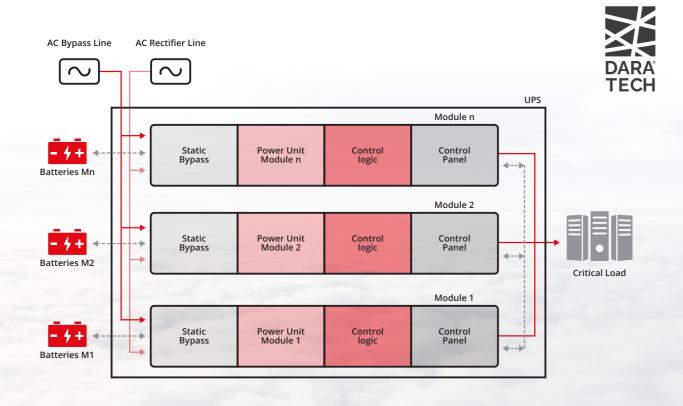
## DARA Take your power availability to the next level

#### 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 DDM© redundancy is taking to the next level where all modules collaborate to make critical decisions to secure your load remains energized. This technology enables the UPS to make distributed decisions that eliminate the single point of failure of a typical master-slave technology. DDM minimize downtime and safeguard critical loads.

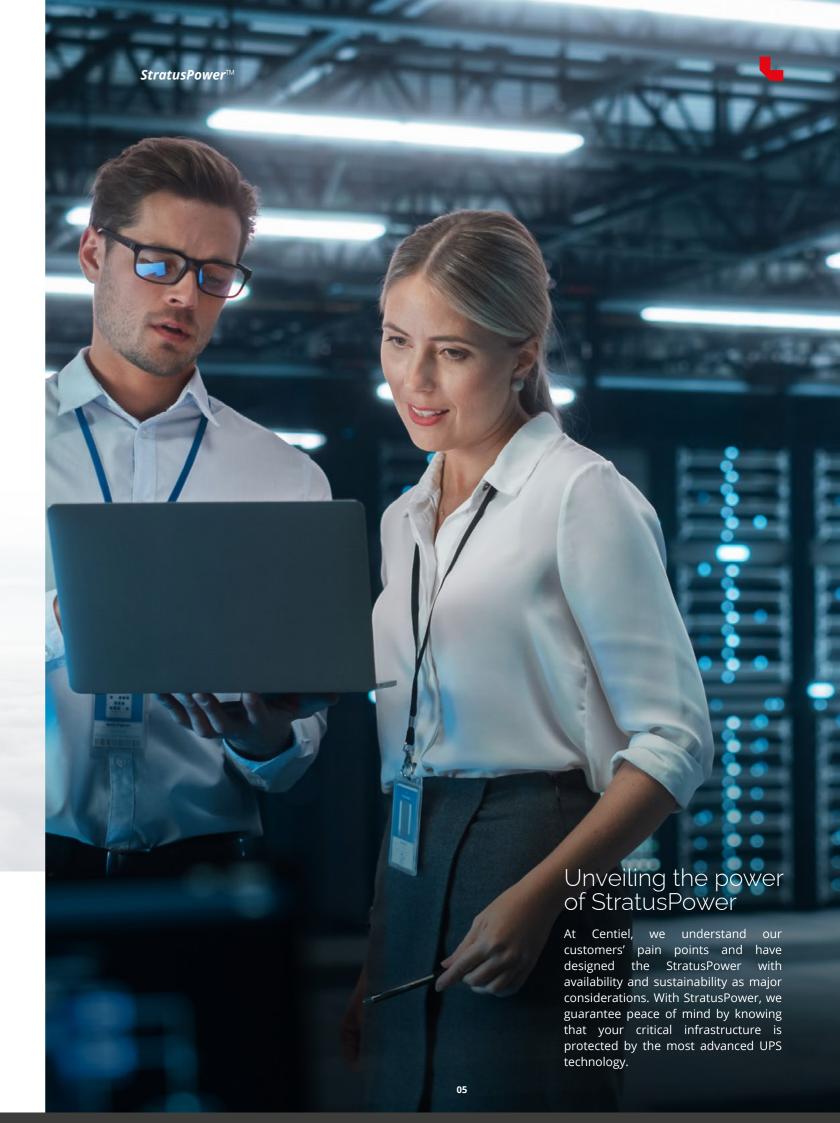
#### Maximized availability at module level



#### 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, avoid the need to removing modules, reducing the risk of human error.





### Enabling the future





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

## Advanced energy management

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

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

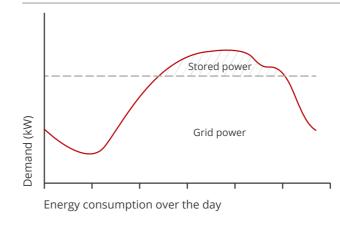


Fig.1: StratusPower's peak-shaving capabilities

At times of peak consumption, grid operators can demand a higher price for their power. Some of the energy stored locally in the UPS can be used at these times, reducing the amount taken from the grid. (However, UPS power reserves will never be allowed to drop below what is required to supply the critical loads.) UPS batteries can then be recharged using offpeak power. Exploiting local energy storage in this way not only cuts upfront energy costs for the user but also reduces the excess generation capacity the power supplier has to have on hand. Local UPS energy storage also supports the ongoing move away from centralized power suppliers to distributed, renewable generation and storage.

#### With the future in mind

Thanks to its DCFlex® technology, StratusPower is future-ready to connect to different power generation sources, prepared to provide grid support in frequency and voltage and to manage the energy as it best fits the application













## technology

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. This technology allows you to reuse any kind of current DC supply reducing your project cost to the minimum.

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 remote health monitoring

Thanks to its computing capabilities and over 100+ measuring points, StratusPower does the work for you, ensuring that maintenance is performed promptly and

This not only saves time and effort but also improves your system's overall reliability and safety.

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 inverter design

The StratusPower also boasts a reliable, widely proven semiconductor technology, 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 StratusPower with an extra safepower 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.

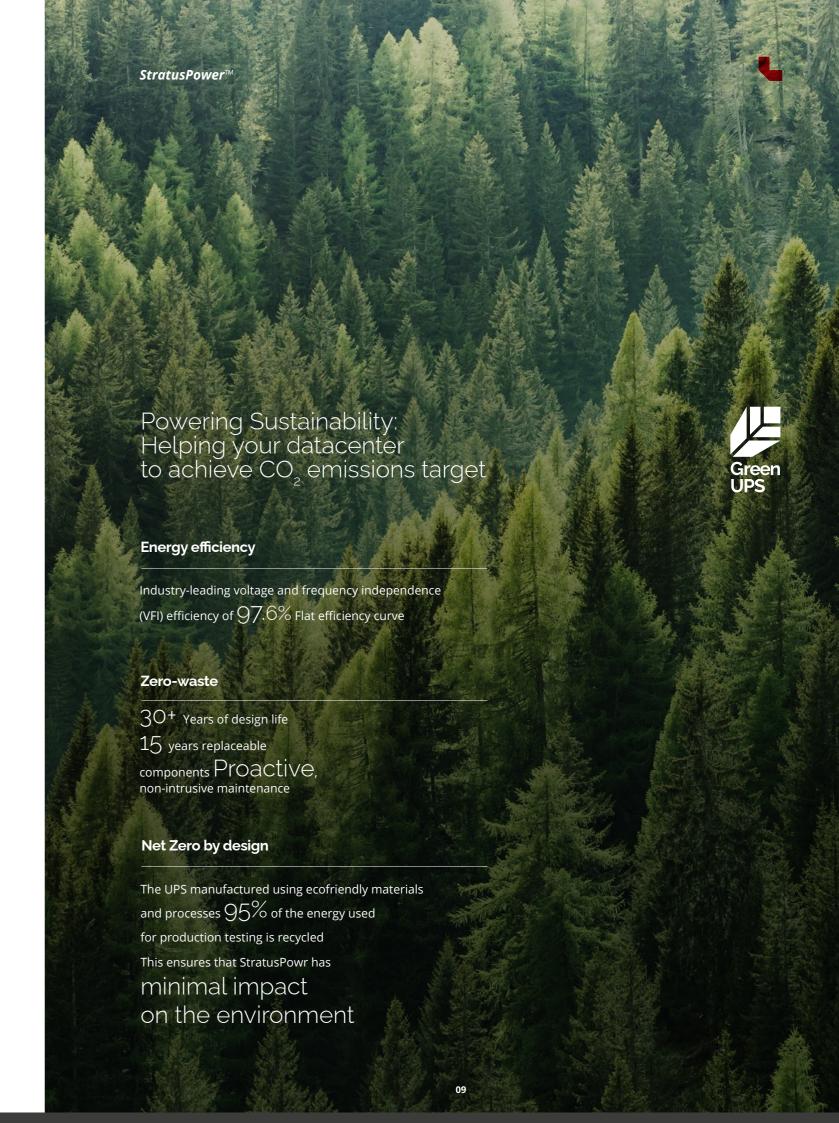
With a THDi of less than 1 percent, the StratusPower provides an excellent performance that exceeds regulatory requirements.





Stay connected and in control with StratusPower

Connectivity is a critical aspect of any modern power solution. With a range of connectivity options, StratusPower provides users with real-time data and control, giving them peace of mind that their power solution is working optimally.



#### *StratusPower*™

## 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	CAB-SP750(B/T)-E-2K
Up to 6x SM50/60/62.5 kW	Up to 12x SM50/60/62.5 kW
375 kW	750 kW
1985 x 656 x 900	1985 x 1312x 900
0.59 m <sup>2</sup>	1.2 m <sup>2</sup>





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Model	CAB-SP1125(B/T)-E-K
Modules	Up to 6 x SM50/60/62.5 kW
Nom. power /cabinet	1,125 kW
Dimensions h x w x d (mm)	1985 x 1968x 900
Footprint	1.77 m <sup>2</sup>

CAB-SP1500(B/T)-E-2K
Up to 12x SM50/60/62.5 kW
1,500 kW
1985 x 2624x 900
1.86 m <sup>2</sup>

Scalability up to 3.75 MW



#### Technical Datasheet

Number of modules per frame   1-6   1-12   1-18   1-24	ı	ecnr	nical Datasheet				
Module type			Model	CAB-SP375B-E-K	CAB-SP750B-E-K2	CAB-SP1125B-E-K3	CAB-SP1500B-E-K4
Nom. power per module [kWa = kW]   50 / 62.5   50 / 62.5   50 / 62.5   50 / 62.5   50 / 62.5   60/75				CAB-SP375T-E-K	CAB-SP750T-E-K2	CAB-SP1125T-E-K3	CAB-SP1500T-E-K4
Cont. power per module [kVA = kWJ]   60/75   60/75   60/75   60/75   125   1500			Module type	SM50 / SM62	SM50 / SM62	SM50 / SM62	SM50 / SM62
Nom. power per frame [kVA = kW]   375   750   1125   1500			Nom. power per module [kVA = kW]	50 / 62.5	50 / 62.5	50 / 62.5	50 / 62.5
Number of modules per frame	a		Cont. power per module [kVA = kW]	60/75	60/75	60/75	60/75
Number of modules per frame	General Data		Nom. power per frame [kVA = kW]	375	750	1125	1500
Number of modules per frame   1-6	ener		Cont. power per frame [kVA = kW]	450	900	1350	1800
Topology / technology	ឲ		Number of modules per frame	1-6	1-12	1-18	1-24
Input wiring			Max. power per system [kVA = kW]	3750	3750	3750	3750
Rated voltage			Topology / technology	Online double conve	ersion / DARA (Distrib	uted Active Redundan	t Architecture)
Inverter   Voltage range   For loads <100% (-25%, +20%), <80% (-32.5%, +20%), <60% (-35%, +20%)   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 wiring   3 Ph + N + PE			Input wiring	3 Ph + N + PE			
Input frequency   30-70 Hz			Rated voltage	380/400/415Vac			
Input trequency  Total Harmonic Distortion Input power factor  0,99  Input wiring  3 Ph + N + PE  430±10% (Voltage) (According to VFI-SS-111) Input frequency  50/60 ±2/4% (selectable)  Rated voltage Internal batteries (7/9Ah)  Battery  Type  Lead-Acid / NiCad / Lithium / Zink / Salt / others  Blocks[LA] Charger (Amps per module)  Output wiring  3Ph+N+PE  Voltage Frequency  Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode)  Inverter  Output power factor  1  Efficiency  97,6%  Overload capacity  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency  99,4%  Operating temperature  40-70°C  Relative humidity  0%-95% (No condensing)  Maximum operating altitude  Dimensions (H x W x D) [mm]  1985 x 656 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900    Certifications  EN/EC 62040-1   EN/IEC 62040-3   CE   RoHS			Voltage range	For loads <100% (-25	%, +20%), <80% (-32.59	%, +20%), <60% (-35%, +	+20%)
Input power factor   0,99		Inverter	Input frequency				
Input wiring   3 Ph + N + PE    Rated voltage   ±30±10% (Voltage) (According to VFI-SS-111)    Input frequency   50/60 ±2/4% (selectable)    Rated voltage   240 - 600 Vdc (the number of batteries can be selected )    Internal batteries (7/9Ah)   E: External    Battery   Type   Lead-Acid / NiCad / Lithium / Zink / Salt / others    Blocks[LA]   20-50    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)    Inverter   Output power factor   1    Efficiency   97,6%    Overload capacity   Inverter: 124% continuous, 125% for 15min, 150% for 120 sec    Bypass   Efficiency   99,4%    Operating temperature   0-40°C (No power derating)    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    Dimensions (H x W x D) [mm]   1985 x 566 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900    Certifications   EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Total Harmonic Distortion	THDi<0.8% for linear load, THDi<3% for nonlinear load			
Input wiring   3 Ph + N + PE    Rated voltage   ±30±10% (Voltage) (According to VFI-SS-111)    Input frequency   50/60 ±2/4% (selectable)    Rated voltage   240 - 600 Vdc (the number of batteries can be selected )    Internal batteries (7/9Ah)   E: External    Battery   Type   Lead-Acid / NiCad / Lithium / Zink / Salt / others    Blocks[LA]   20-50    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)    Inverter   Output power factor   1    Efficiency   97,6%    Overload capacity   Inverter: 124% continuous, 125% for 15min, 150% for 120 sec    Bypass   Efficiency   99,4%    Operating temperature   0-40°C (No power derating)    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    Dimensions (H x W x D) [mm]   1985 x 566 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900    Certifications   EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Input power factor				
Input frequency   50/60 ±2/4% (selectable)	5		·				
Input frequency	Input	Bypass	·	±30±10% (Voltage) (According to VFI-SS-111)			
Internal batteries (7/9Ah)  E: External  Type  Blocks[LA]  Charger (Amps per module)  Output wiring  Voltage  Frequency  Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode)  Inverter  Output power factor  Efficiency  Overload capacity  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency  Operating temperature  Output power derating)  Storage temperature  Au-70°C  Relative humidity  Maximum operating altitude  Dimensions (H x W x D) [mm]  Dimensions (H x W x D) [mm]  E: External  Lead-Acid / NiCad / Lithium / Zink / Salt / others  Bylas / Salt / others  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec  Bypass  Find a continuous / 125% for 15min, 150% for 120 sec			Input frequency				
Battery Type  Blocks[LA]  Charger (Amps per module)  Output wiring  3Ph+N+PE  Voltage Frequency Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode)  Output power factor  Efficiency Overload capacity  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency  99,4%  Operating temperature Storage temperature Storage temperature A-40-70°C Relative humidity Maximum operating altitude  Dimensions (H x W x D) [mm]  Dimensions (H x W x D) [mm]  EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   ROHS			Rated voltage	240 - 600 Vdc (the nu	mber of batteries can b	e selected )	
Blocks[LA]   20-50     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)     Inverter   Output power factor   1     Efficiency   97,6%     Overload capacity   Inverter: 124% continuous, 125% for 15min, 150% for 120 sec     Bypass   Efficiency   99,4%     Operating temperature   0-40°C (No power derating)     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     Dimensions (H x W x D) [mm]   1985 x 656 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900     EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Internal batteries (7/9Ah)	E: External			
Charger (Amps per module)   50		Battery	Туре	Lead-Acid / NiCad / Lithium / Zink / Salt / others			
Output wiring  Voltage  380/400/415 Vac±1%  Frequency  Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode)  Output power factor  Efficiency  97,6%  Overload capacity  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency  99,4%  Operating temperature  0-40°C (No power derating)  Storage temperature  40-70°C  Relative humidity  Maximum operating altitude  Dimensions (H x W x D) [mm]  Dimensions (H x W x D) [mm]  Politications  1000 m. above 1000 m, derating 1% for each additional 100 m  EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Blocks[LA]	20-50			
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Inverter  Frequency  Output power factor  Efficiency  Overload capacity  Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency  Operating temperature  Storage temperature  Au-70°C  Relative humidity  Maximum operating altitude  Dimensions (H x W x D) [mm]  Dimensions (H x W x D) [mm]  Certifications  Tracking the bypass input (Online Mode); 50 / 60 Hz ± 0.05% (Battery Mode)  1  1  1  1  1  1  1  1  1  1  1  1  1			Output wiring	3Ph+N+PE			
Inverter Output power factor  Efficiency 97,6%  Overload capacity Inverter: 124% continuous, 125% for 15min, 150% for 120 sec  Bypass  Efficiency 99,4%  Operating temperature 0-40°C (No power derating) 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  Dimensions (H x W x D) [mm] 1985 x 656 x 900 1985 x 1312 x 900 1985 x 1968 x 900 1985 x 1968 x 900 1985 x 2624 x 900 Certifications  EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Voltage	380/400/415 Vac±1%			
Overload capacity   Inverter: 124% continuous, 125% for 15min, 150% for 120 sec			Frequency	Tracking the bypass in	nput (Online Mode); 50	/ 60 Hz ± 0.05% (Batter	y Mode)
Overload capacity   Inverter: 124% continuous, 125% for 15min, 150% for 120 sec	but	Inverter	Output power factor	1			
Bypass         Efficiency         99,4%           Operating temperature         0-40°C (No power derating)           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           Dimensions (H x W x D) [mm]         1985 x 656 x 900         1985 x 1312 x 900         1985 x 1968 x 900         1985 x 2624 x 900           Certifications         EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS	5		Efficiency	97,6%			
Bypass         Efficiency         99,4%           Operating temperature         0-40°C (No power derating)           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           Dimensions (H x W x D) [mm]         1985 x 656 x 900         1985 x 1312 x 900         1985 x 1968 x 900         1985 x 2624 x 900           Certifications         EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			Overland conneits	Improvement 1240/ combi	125% for 15m	n 4500/ for 120 cos	
Operating temperature		_					
Storage temperature		Bypass	-				
Dimensions (H x W x D) [mm]   1985 x 656 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900     Certifications   EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS	en			·	rating)		
Dimensions (H x W x D) [mm]   1985 x 656 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900     Certifications   EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			-		ing)		
Dimensions (H x W x D) [mm]   1985 x 656 x 900   1985 x 1312 x 900   1985 x 1968 x 900   1985 x 2624 x 900     Certifications   EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS			-		_	additional 100 m	
Certifications EN/IEC 62040-1   EN/IEC 62040-2   EN/IEC 62040-3   CE   RoHS							1985 x 2624 x 900
	Others						
Communications RS485, USB, Dry Inputs   Dry contacts, Ethernet, Bluetooth	อี		Communications	·	·		

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