S POWER

SOLID STATE GROUND POWER UNIT

With its **S POWER**, Hitzinger presents a new standard of ground power generation for all aircrafts during the flight preparation phase. Optimized voltage quality and the highest level of supply security at maximum serviceability and simplified operation make **S POWER** a reliable unit that will meet high standards for the long term. The Hitzinger **S POWER** Stack Technology combines active power factor correction with state of the art inverter technology.

APPLICATIONS

→ Fixed ground installation
→ Bridge mounted
→ Towable applications

POWER RANGE

→ **S** POWER 45 to 180 kVA

ENVIRONMENT

→ Ambient temperature:
-30° C to +52° C
→ Relative humidity
10 to 95 %
→ Noise level:
< 65 dB (A) @ 1m

STANDARD VERSION

→ Standard cabinet
- IP-protection IP55
- Enclosure material: UV-resistant, powdercoated aluminium in RAL9006
- Frontdoor: PMMA (Polymethylmethacrylat), UV-, oil-, acid-, scratch-resistant
- Lockable door

→ Remote diagnosis
- Master/Slave
- Ventilation regulator including temperature monitoring
- Current operational condition
- Exact error notification
- Overload switch including temperature monitoring
- Compatible with div. operating systems (Windows, Linux)

OPTIONS

→ 28VDC unit, 600/2500A in stack technology
→ Remote control panel
→ Additional output conductor
→ Automatic cable drum
→ LED indication (RGB)
→ Potential-free contacts
→ Bus interface (MODBUS/TCP, Profibus)
→ Neutral wire disruption monitoring
→ Neutral voltage supervision

STANDARDS

→ ISO 6858 - Aircraft ground support electrical supplies
→ BS 2G 219 - General requirements for ground support equipment
→ SAE ARP 5015 - Ground Equipment 400Hz ground power performance requirements
→ DFS 400 - Specification for 400Hz aircraft power
→ MIL-STD-704 - Aircraft electrical power characteristics
→ EN2282 - Characteristics of aircraft electrical supplies
→ EN61439 - Low-voltage switchgear and controlgear assemblies
→ EN61000-6-4 - Electromagnetic compatibility
→ EN12312-20 - Specific requirements for electrical ground power units
→ EN1915 -1 / -2 - Aircraft ground support equipment, general safety requirements

FOR OVER 60 YEARS, QUALITY, EFFICIENCY, AND DURABILITY HAVE BEEN THE FOUNDATIONS OF OUR SUCCESS. COUNTLESS INDUSTRIES THROUGHOUT THE WORLD PLACE THEIR TRUST IN US TO PROTECT AND POWER THEIR BUSINESSES AT EVERY MOMENT OF EVERY DAY. AS A WORLD LEADER IN TAILOR-MADE POWER SOLUTIONS, WE ARE YOUR PARTNER FOR INNOVATION, VALUE AND SERVICE. WE ENSURE THAT YOU'VE GOT THE POWER.

POWER. ANYTIME. ANYWHERE.

GENSETS | ALTERNATORS | UPS-SYSTEMS | CONVERTERS | **AIRPORT TECHNOLOGIES**

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A Member of Dr. Aichhorn Group

CONCEPT A

Technical specifications and illustrations correspond with those at the time of printing. Subject to change.

YOU GOT THE **POWER.**

AIRPORT TECHNOLOGIES

S POWER **Solid State Ground Power Unit**

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GUARANTEED POWER

From the installation to the first start and permanent application, **S POWER** sets itself apart with its reliability and its simple operation. Optimal voltage quality at maximum service security and serviceability power. Guaranteed power for all types of aircraft.

MAXIMUM EFFICIENCY

The intelligent distribution of the individual stacks and the configuration of the **S POWER** guarantees very high efficiency during turn-down for all load requirements.

HIGHEST RELIABILITY

The plug&play system featured by stack technology enables individual stacks to be easily serviced. In case a stack fails, redundant operation is possible.

BEST SERVICEABILITY

Remote maintenance enables every important operational state to be displayed and parametrized, and regulation of ventilation and temperature monitoring may also be adjusted. Exact error notification shortens maintenance periods and optimizes service.

USERFRIENDLY CONTROLS

The touch panel on the controller features intuitive user guidance. The display is easy to read in sunny conditions, it is dust and waterproof, and it is suitable for the most adverse airfield conditions. It may even be operated by gloved hands.

SIMPLY BRILLIANT

Economic efficiency, safety and maximum flexibility are the main focus of our development strategy.
We evaluate the power of innovation according to the benefit that it provides our consumers.
More power for less investment and optimal handling.

ECONOMIC
GROUND POWER

INNOVATIVE TECHNOLOGY

- → Active power factor correction (PFC)
- → Compatible stack-design
- → 3-level inverter-technology
- → Precise synchronization of individual stacks without power-cable
- → Exact load calculation
- → Lowest weight
- → Stack-protection IP66

SIMPLIFIED MAINTENANCE

- → Maintenance friendly via remote diagnosis and self-diagnosis
- → Serviceable individual stacks
- → Ergonomic unit
- → MTTR < 10 minutes

MONITORING SYSTEM

- → High comfort due to touch panel design
- → Easy settings
- → Easy and reliable at any location in the world
- → Intuitive menu guidance
- → Superior display readability
- → Resistant touch screen
- → Protection classification Touch panel IP6K7

ECONOMIC EFFICIENCY

- → Efficiency ≥ 93%, independent of load profile
- → Active temperature / cooling management

SECURITY

- → Protection concept for TN and TT grids
- → Emergency operation in case a 45kVA stack fails

FLEXIBILITY

- → Modular design from 45kVA to 180kVA
- → Indoor/outdoor application

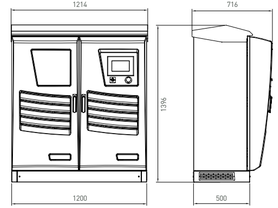
TECHNICAL SPECIFICATIONS

INPUT		
Voltage:	3 x 400V~ ±10%, 3 x 480V~ ±10%; other voltage ranges available upon request	
Frequency:	50/60Hz ±5%	
Power factor:	0,99 via PFC (Power Factor Correction)	
Current distortion:	< 5%	
Inrush current:	none, (<I nominal)	
OUTPUT		
Power:	45kVA to 180kVA	
Power factor:	1,0	
Voltage:	3 x 115/200V	
Frequency:	400Hz	
Load power factor:	0,6 inductive to 0,95 capacitive	
Static voltage regulation:	<0,5%	
Crest factor:	1.414 ±3%	
Phase angle symmetry:	120° ±1° for balanced load	
	120° ±2° for 30% unbalanced load	
Total harmonic content:	< 3%	
PROTECTION		
Protection class: IP55 Standard, isolated system (protective isolation system according to DFS400), short circuit protection at input and output, over/under-voltage protection, overload protection, over-temperature protection		
DIMENSIONS AND WEIGHT		
Fixed ground installation:		
S POWER 90S	~ 350kg	1396 x 614 x 716mm (H x W x D)
S POWER 180S	~ 480kg	1396 x 1214 x 716mm (H x W x D)
45kVA stack:	~ 40kg	

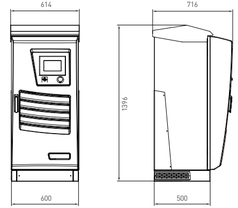
OVERLOAD CHARACTERISTICS				
125% for 10min	150% for 1min	200% for 30sec.	300% for 10sec.	400% for 1sec.

DIMENSIONS

S POWER 180S



S POWER 90S



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