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# S-Power

S400-A / S400  
Aircraft Solid-State Power Units



# Who We Are

**AEME GSE is a global pioneer in aviation Ground Support Equipment (GSE), driving the green transformation of airports with innovative energy solutions.**

With over 20 years of expertise in power electronics technologies, we offer a comprehensive portfolio of GSE products—including eGPUs, solid state power units, energy management systems, and cable reels.

Our solutions are widely deployed at major civil airports in the Asia-Pacific and are rapidly expanding into global markets.

From independent R&D and intelligent manufacturing to a global service network, AEME delivers scalable, reliable, and adaptable green airport solutions tailored to diverse operational needs.

**20+** Years

Of expertise in power industry

**2.6+** Million tons

Carbon Emissions Reduced

**95,000** m<sup>2</sup>

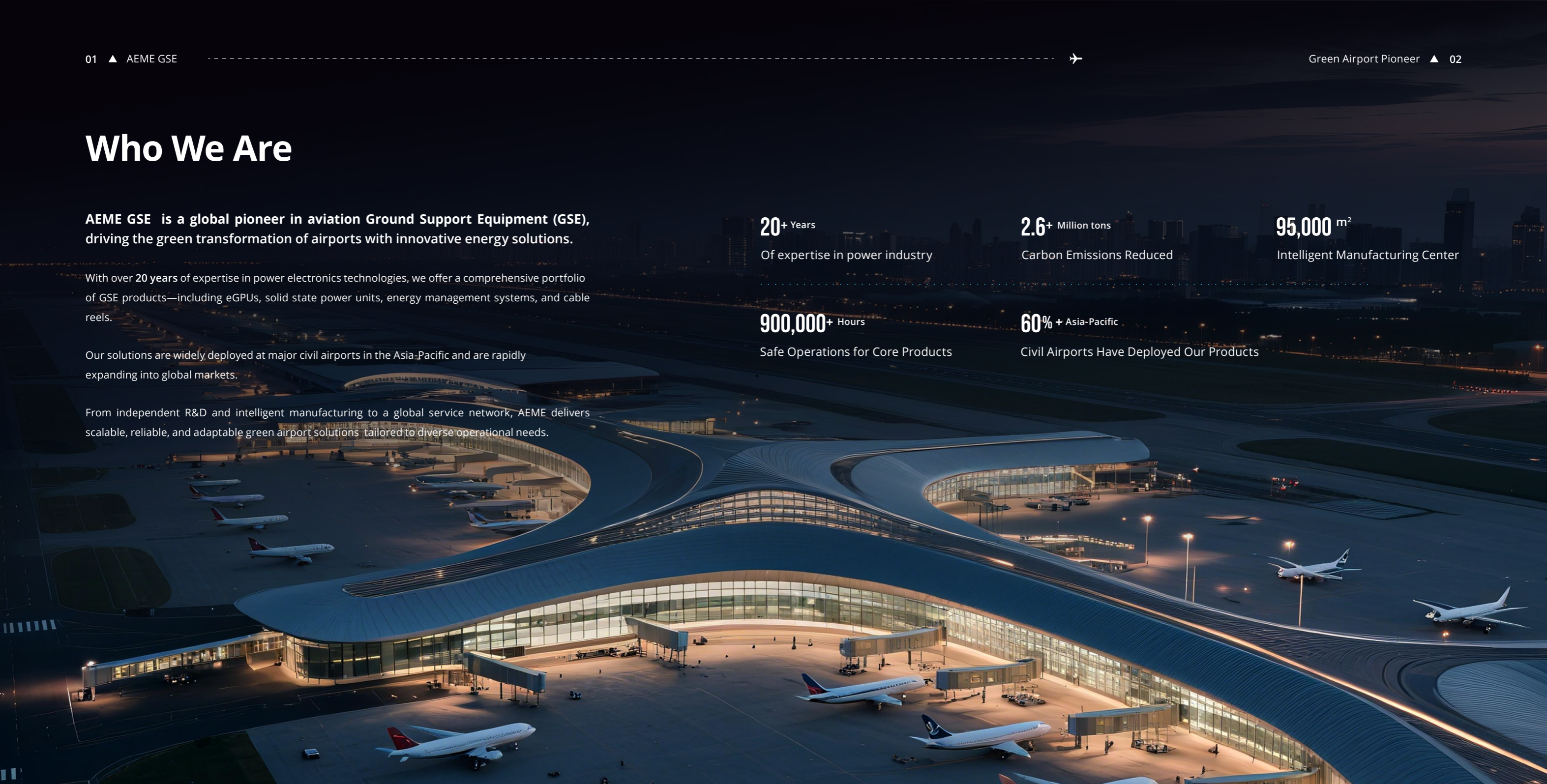
Intelligent Manufacturing Center

**900,000+** Hours

Safe Operations for Core Products

**60%+** Asia-Pacific

Civil Airports Have Deployed Our Products



# S-Power

## Efficient 400Hz Solid-State Power for Civil Aviation

Designed specifically for civil aviation airports, the S-Power Solid-State Power Units provide a clean, stable, and highly efficient 400Hz power supply, offering a reliable alternative to traditional APUs.

The system combines a Solid-State Power Unit with optional configurations such as a cable reel and towable chassis, adapting seamlessly to various operational scenarios. Ideal for both remote and contact stands, it fully meets the power requirements of a wide range of civil aircraft.



### Modular Design and Easy M&O

Compact and modular design allows for flexible installation and easy maintenance.



### Cloud Service

Integrated with a self-developed cloud platform for digital equipment management.



### Reliable Power Supply

Stable output during grid voltage sags.



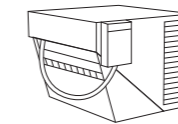
### Intelligent Diagnostics

Enables full-process diagnostics, precise fault localization, and streamlined maintenance, significantly improving operational efficiency.



## S400-A

AGSP-ASS-090H-H



### Bridge-Mounted Solid-State Power Unit

400Hz/90kVA Solid-State Power Unit +  
Cable Reel + Optional Towable Chassis

- Consists of ground power unit and cable reel, making it suitable for boarding bridge installations.
- An optional towable chassis allows deployment at both contact gates and remote stands.



## S400

AGSP-ASS-090H-H



### Solid-State Power Unit

400Hz/90kVA

- Compatible with both bridge-mounted and floor-mounted installations.



## S400

### Towed Solid-State Power Unit

400Hz/90kVA Solid-State Power Unit +Towable Chassis

- The flexible design enables wide-range movement, suitable for both remote and contact stands.





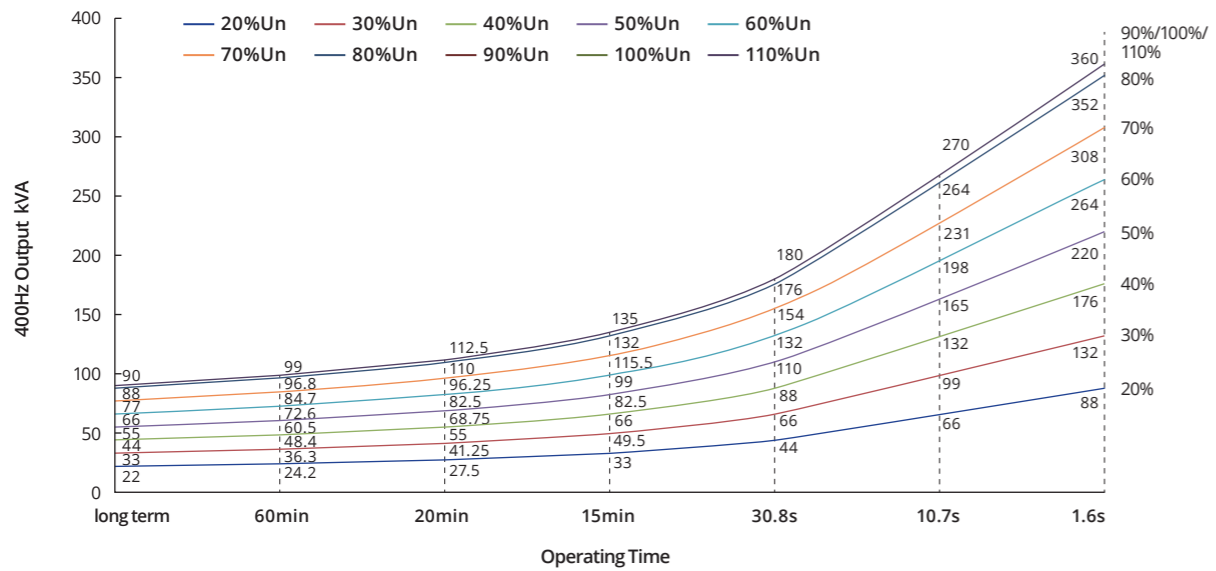
# Power assurance when it matters most

The S-Power solid-state power unit integrates advanced technologies such as low-voltage ride-through (LVRT), space vector pulse width modulation (SVPWM), voltage decoupling control, and dynamic voltage compensation. These features ensure stable voltage output and reliable power delivery even under unbalanced load conditions.

## LVRTech: What It Is and How It Works

LVRTech™ is AEME's independently developed voltage stability solution. It resists grid voltage dips and interruptions, significantly enhancing the reliability of aircraft power supply. When the power is below 50 kW and the input voltage falls by 60% (input voltage 160 V), the unit can continue operating for up to 2 seconds, delivering reliable performance that surpasses conventional solutions.

### S-Power LVRTech Output Capability



### Extended Ride-Through Duration



When the power is below 50 kW and the input voltage falls by 60% (input voltage 160 V), the unit can continue operating for up to 2 seconds.

### Effective Equipment Protection



Prolongs power continuity to prevent faults and damage caused by voltage fluctuations.

### Provides Critical Response Time



Offers valuable time for maintenance teams to respond and initiate repairs.

### Enhances Operational Continuity



Ensures reliable and continuous operation of airport ground equipment.



# 400Hz Power Supply Solution

Our 400Hz Power Supply Solution supports global carbon neutrality efforts by enabling APU shutdown during aircraft ground parking.

## Flexible Installation

Modular design allows for flexible deployment in various scenarios

## High Reliability

Supports low-voltage ride-through functions

## High Efficiency

Improved system efficiency to lower energy costs

## Key Products

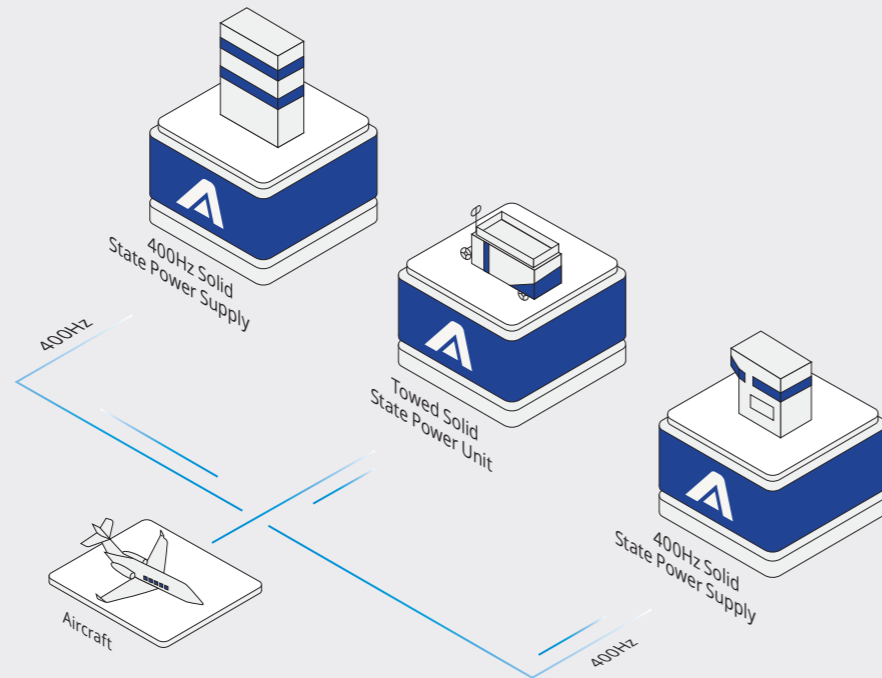


ECOTUG




S-Power

AC




# Application Cases Solid-State Power Unit




 Hangzhou International Airport



 Nanchang International Airport



 Nanchang International Airport

Product	S400-A	S400
Product Model	AGSP-ASS-090H-H	AGSP-ASS-090H-H
<b>AC Input</b>		
Rated voltage		380VAC
Rated frequency range		50Hz/60Hz
Connection mode		3P+N+PE
Power factor		≥0.99
Surge current		No
<b>400Hz Output</b>		
Rated capacity		90kVA
Rated frequency range		400Hz
Power factor		0.7-1
DC component		±0.1V
Voltage THD		< 3%
Crest factor		1.414±4%
Phase voltage unbalance		< 1%
Steady-state frequency		400Hz
Voltage modulation amplitude		< 1%
Phase shift		120°±1°
<b>Overload</b>		
125%		Lasts 10min
150%		Lasts 60s
200%		Lasts 30s
300%		Lasts 10s
400%		Lasts 1s
<b>Protect</b>		
Level of protection		IP54
Uninterrupted power transmission		Available
Output over/under voltage protection		Available
Overload protection		Available
Internal over-temperature protection		Available
Output short circuit protection		Available
Output N line disconnection protection		Available
Output N-line voltage monitoring		Available
Leakage current monitoring		Available
Input over/under voltage protection		Available
Input overcurrent protection		Available
<b>Efficiency</b>		
Compound efficiency		≥91%
<b>Environment</b>		
Operating temperature		-20°C-55°C
Relative humidity		10%-100% (no condensation)
Noise level		<70dB
Dimensions(mm)	1580*1050*800	1050*580*800
Weight	807kg	432kg
<b>Towed Integrated</b>		
Dimensions(mm)	1900*1050*1630	1360*1190*1630
Weight	872kg	552kg



# Why AEME GSE

## Technical Innovation



Leveraging advanced technology, AEME leads in green energy storage R&D. Our innovative aircraft ground power supply, ultra-silent modular PCS, and all-in-one systems are widely recognized by the market.

## Customer Support



We provide one-stop solutions with proven capabilities in R&D, manufacturing, quality control, and delivery, offering complete support from design to installation and commissioning.

## Quality Control



AEME adheres to "quality-first" philosophy. Our team ensures every product meets the highest industry standards.

## Delivery Capability



Customer-centric and execution-driven, AEME offers standardized project delivery and O&M systems, ensuring high quality and efficiency from start to finish.