



POWERGOOP

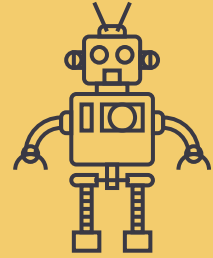
AC/DC Power Modules

Experts born for the power module

POWERGOOD was founded in 1989 and has been around for more than 30 years, we provide the best quality, patent topology circuit, stable Lead-Time, professional service and become a stronger supporter and partner for customers. PowerGood has completed product roadmap, we can provide standard products from AC/DC to DC/DC power converter to satisfy customers' requirement, we cooperate with customer to develop customized product as the solution to help customer to wins the project, deepen the cooperation level and strengthen the long-term partnership.

Power Module for Industry Application

POWERGOOD provides a variety of power converter modules, which can be applied to industry equipment and systems. We provide modules which has output power from 1W-600W, input voltage range covers 9-700Vin and conform to many countries' safety certification and EMC certification. Instead of power module, we provide flexible Power Supply Unit (PSU), fast customized service can closely foresee the pulsation of the market. POWERGOOD keep innovation internally, provide the most suitable products to customer and become a pioneer in Industry Equipment Application field.



Power Module for Railway Application

Railway Transit Construction has entered a stage of rapid development. In the face of more stringent design and challenging requirements, POWERGOOD modules are still highly reliable and durable. They can be applied to traction equipment, monitor equipment, communication equipment, driving equipment such systems in railway application. POWERGOOD rail series product with wide operating temperature, high isolation and withstand voltage, pass EN50155 certification and EN45545-2 fire proof certification, is the best solution for railway transit applications.



Power Module for Aviation Application

In addition to being small in size and light in weight, aviation applications require superior high output power and efficiency. POWERGOOD products have the largest power density ratio in the industrial, making it easy to meet customers' product design and create the best competitive advantage. POWERGOOD provides excellent EMI performance with metal case encapsulated that saves overall radiation and electrical interference. Additionally, due to wide operation temperature, our products can keep stable output under extremely low temperature and high temperature environment, making it a reliable support for customer in aviation applications.



Power Module for Medical Application

Power modules required by the medical industry tend to be small, professional and reliable. In response to harsh application for medical equipment and enhanced isolation system, POWERGOOD provide BF Grade design for medical power module, and increase the insulation to 4kVac, leakage current 100uA, making it suitable for ventilator, analyzer such medical equipment. As new medical equipment continue to emerge, POWERGOOD will design more and more power module for medical applications in response to the market demand.



Quality Policy and Green Environment



Quality Control and Green Environment

POWERGOOD's quality policy of "Quality First, Customer Satisfaction" has won many awards and recognitions in the industry for over 30 years. It is the responsibility of every PG person to protect the environment that we depend on to survive. From the cautious use of carbon footprint, water footprint or conflict metals to the selection of packaging materials for process optimization. POWERGOOD has passed the internationally recognized quality and environmental management system certification, "compliance with regulations, waste reduction and energy saving, pollution prevention, full participation, continuous improvement, and good communication".

ISO 9001 Quality Control System

ISO 14001 Environment Control System



CE Qualification Declaration

POWERGOOD comply with industry safety standards, EU Low Voltage Directive (LVD) 2014/35/EU and EMC Directive 2014/30/EU.



RoHS Certificate of Compliance

POWERGOOD's products are manufactured in accordance with the EU 2011/65/EC and EU 2015/863 RoHS directive (products excluded from the sales plan are not included in this statement). We restrict the use of ten chemical substances in packaging materials (boxes, pipes, coils...) and waste disposal comply with EU directive 2004/12/EC, the total concentration of cadmium, hexavalent chromium, lead and mercury is less than 100ppm, the implementation of the concept of environmental protection in product design, manufacturing, use, scrap and recycling, to provide a positive contribution to sustainable development, but also for our next generation to preserve a pure earth.



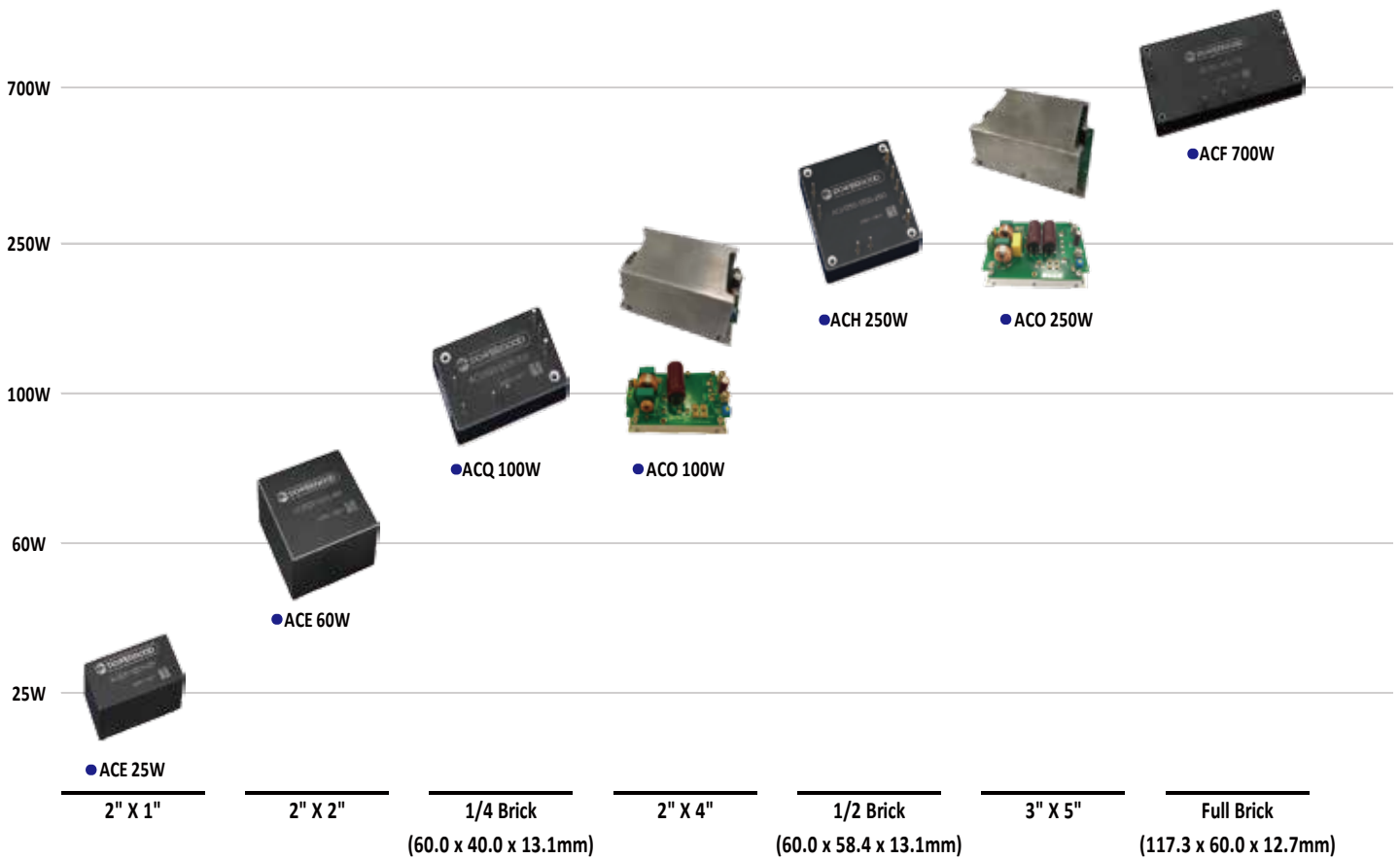
REACH Declaration of Conformity

In response to improving human health and maintaining the global environment, POWERGOOD is committed to REACH compliance (EC Regulation No.1907/2006, concerning Registration, Evaluation, Authorization and Restriction of Chemicals).

Product safety and reliability are the core values of POWERGOOD

- EMEA CE International certification
- Railway EN 50155 (IEC60571) certification
- Fire Proof protection EN 45545-2 certification
- UL/IEC/EN 62368-1 information type international certification
- EMC standard EN 55011 & EN 55032 certification
- MIL-STD-461 certification
- UL/IEC/EN 60601-1 Medical safety certification

PowerGood AC/DC Converter



	Series	Output Power	Input Voltage Range (VAC)	Output Voltage (VDC)	Isolation Voltage	Eff.	Operating Temp.	Dimensions
E Series	ACE25	25W	90~264	5,12, 15, 24, 36, 48	4000 VAC	88%	-40°C~+80°C	2.10" x 1.10" x 0.96" 53.40 x 28.00 x 24.44mm
	ACE60	60W	90~264	5,12, 15, 24, 36, 48	4000 VAC	90%	-40°C~+80°C	2.10" x 2.10" x 1.10" 53.34 x 53.34 x 27.94mm
Brick Series	ACQ100	100W	90~264	5,12, 24, 28, 36, 48	3000 VAC	91%	-40°C~+100°C	2.36" x 1.57" x 0.50" 60.00 x 40.00 x 12.70 mm
	ACH250	250W	90~264	12, 24, 28, 36, 48	3000 VAC	91%	-40°C~+100°C	2.36" x 2.30" x 0.50" 60.00 x 58.40 x 12.70 mm
	ACF700	700W	90~264	12, 24, 28, 36, 48	3000 VAC	90%	-40°C~+100°C	2.36" x 4.62" x 0.50" 60.00 x 117.34 x 12.70 mm
PSU Series	ACO100	100W	90~264	5,12, 24, 28, 36, 48	3000 VAC	91%	-40°C~+100°C	4.00" x 2.06" x 1.57" 101.60 x 52.40 x 40.00mm
	ACO250	250W	90~264	12, 24, 28, 36, 48	3000 VAC	91%	-40°C~+100°C	5.00" x 3.03" x 1.57" 127.0 x 77.0 x 40.00 mm
	ACO700	700W	90~264	12, 24, 28, 36, 48	3000 VAC	91%	-40°C~+100°C	COMING SOON!



Encapsulated Type AC/DC Converter

Feature

- Built-in EMI filter meets EN55032 Class B without external components
- Provide 2 times rated peak load capability
- High density
- High Efficiency up to 90%
- Easy Hold-up time extension
- Output voltage trim range of -10%, +10%
- Leakage current 100uA
- Isolation voltage up to 4000 VAC
- Reference : ACE25 、 ACE60

AC/DC Encapsulated Series Product Feature

AC/DC Converter- E Series

- Built-in EMI filter meets EN55032 Class B without external components
- 90~264VAC full range input
- 2" x 1" Ultra-compact Size
- Isolation voltage up to 4000 VAC
- Encapsulated Power module
- Efficiency up to 87%
- 50W Peak load Capability
- Easy Hold-up time extension
- <0.3W No Load Power Consumption
- 100uA leakage current
- ±10% Output Trimming Function

● ACE25



OCP

OVP

OTP

SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACE25-050S-25	90-264	230	0.13	5	5	25.0	84
ACE25-120S-25	90-264	230	0.13	12	2.1	25.2	85
ACE25-150S-25	90-264	230	0.13	15	1.67	25.1	85
ACE25-240S-25	90-264	230	0.13	24	1.05	25.2	86
ACE25-360S-25	90-264	230	0.13	36	0.7	25.2	87
ACE25-480S-25	90-264	230	0.13	48	0.53	25.4	87

AC/DC Encapsulated Series Product Feature

AC/DC Converter- E Series

- Built-in EMI filter meets EN55032 Class B without external components
- 90~264VAC full range input
- 2" x 2" Ultra-compact Size
- Isolation voltage up to 4000 VAC
- Encapsulated Power module
- Efficiency up to 90%
- 120W Peak load Capability
- Easy Hold-up time extension
- <0.3W No Load Power Consumption
- 100uA leakage current
- ±10% Output Trimming Function

● ACE60



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Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACE60-050S-60	90-264	230	0.25	5	10	50	86
ACE60-120S-60	90-264	230	0.30	12	5	60	88
ACE60-150S-60	90-264	230	0.30	15	4	60	88
ACE60-240S-60	90-264	230	0.29	24	2.5	60	89
ACE60-360S-60	90-264	230	0.29	36	1.67	60	89
ACE60-480S-60	90-264	230	0.29	48	1.25	60	90



Brick Type AC/DC Converter

Feature

- Design for low profile and high temperature applications (Height:0.5inch)
- No life-span constrained Ceramic Capacitor inside
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- AC-DC converter with PFC which is suitable for conduction cooling
- Wide Operating Temperature -40~+100°C
- ±5% Output Trimming Function
- High Efficiency up to 91%
- Reference : ACQ100 、 ACH250 、 ACF700

AC/DC Brick Series Product Feature

AC/DC Converter- Brick Series

- Low Profile in Quarter Brick size (Height:0.5inch)
- 90~264VAC full range input
- Wide Operating Temperature: -40~+100°C
- High density
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Easy Hold-up time extension
- ±5% Output Trimming Function
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling

● ACQ100



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SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACQ100-050S-100	90-264	230	0.49	5	20	100	88
ACQ100-120S-100	90-264	230	0.48	12	8.33	100	90
ACQ100-240S-100	90-264	230	0.48	24	4.16	100	91
ACQ100-280S-100	90-264	230	0.48	28	3.57	100	91
ACQ100-360S-100	90-264	230	0.48	36	2.77	100	91
ACQ100-480S-100	90-264	230	0.48	48	2.08	100	91

AC/DC Brick Series Product Feature

AC/DC Converter- Brick Series

- Low Profile in Half Brick size (Height:0.5inch)
- 90~264VAC full range input
- Wide Operating Temperature: -40~+100°C
- High density
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Easy Hold-up time extension
- ±5% Output Trimming Function
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling
- Optional : Remote ON/OFF function

● ACH250



OCP

OVP

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SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACH250-120S-250	90-264	230	1.21	12	20.80	250	90
ACH250-240S-250	90-264	230	1.19	24	10.4	250	91
ACH250-280S-250	90-264	230	1.19	28	8.93	250	91
ACH250-360S-250	90-264	230	1.19	36	6.44	250	91
ACH250-480S-250	90-264	230	1.19	48	5.20	250	91

AC/DC Brick Series Product Feature

AC/DC Converter- Brick Series

- Low Profile in Full Brick size (Height:0.5inch)
- 90~264VAC full range input
- Wide Operating Temperature: -40~+100°C
- High density
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Optional: Parallel operation possible
- Easy Hold-up time extension
- ±5% Output Trimming Function
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling

● ACF 700



OCP

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SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACF700-120S-700 (Coming Soon!)	90-264	230	3.38	12	58.33	700	90
ACF700-240S-700	90-264	230	3.38	24	29.17	700	90
ACF700-280S-700	90-264	230	3.38	28	25	700	90
ACF700-360S-700	90-264	230	3.38	36	19.44	700	90
ACF700-480S-700	90-264	230	3.38	48	15.58	700	90



PSU Type AC/DC Converter

Feature

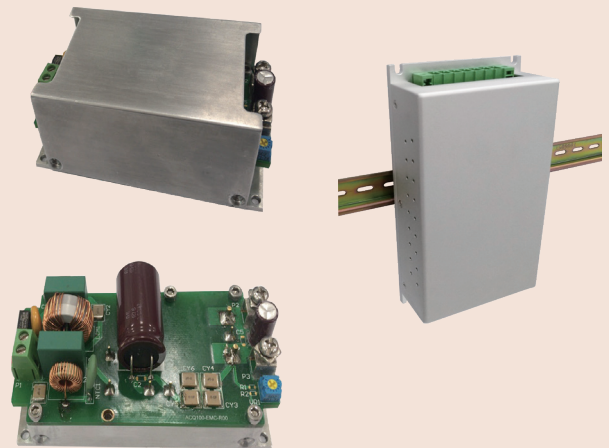
- Built-in EMI filter meets EN55032 Class B without external components
- High density
- Baseplate cooled, heat radiation from the aluminum baseplate to the attached heat sink
- Wide Operating Temperature $-40\sim +100^{\circ}\text{C}$
- Reference : ACO100 、 ACO250 、 ACO700

AC/DC PSU Series Product Feature

AC/DC Converter- PSU Series

- 90~264VAC full range input
- Built-in EMI filter meets EN55032 Class B without external components
- Wide Operating Temperature: -40~+100°C
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Easy Hold-up time extension
- High density
- 2" x 4" Open Frame Compact Size
- Provide cover baseplate 、 open-frame size optional
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling

● ACO 100



OCP

OVP

OTP

SCP

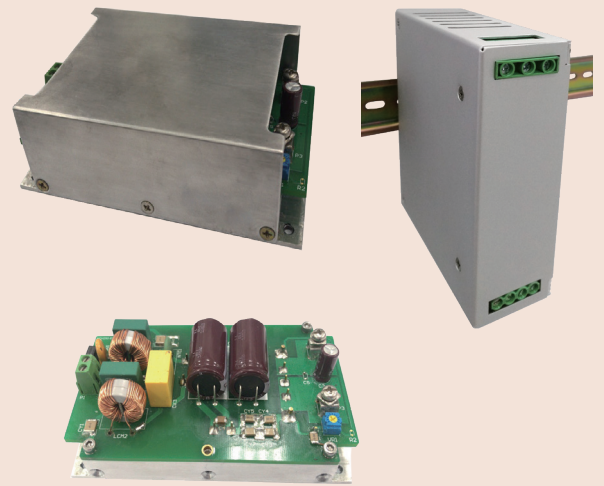
Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACO100-050S-100	90-264	230	0.49	5	20	100	88
ACO100-120S-100	90-264	230	0.48	12	8.33	100	90
ACO100-240S-100	90-264	230	0.48	24	4.16	100	91
ACO100-280S-100	90-264	230	0.48	28	3.57	100	91
ACO100-360S-100	90-264	230	0.48	36	2.77	100	91
ACO100-480S-100	90-264	230	0.48	48	2.08	100	91

AC/DC PSU Series Product Feature

AC/DC Converter- PSU Series

- 90~264VAC full range input
- Built-in EMI filter meets EN55032 Class B without external components
- Wide Operating Temperature: -40~+100°C
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Easy Hold-up time extension
- High density
- 3" x 5" Open Frame Compact Size
- Provide cover baseplate & open-frame size optional
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling

● ACO 250



OCP

OVP

OTP

SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACO250-120S-250	90-264	230	1.21	12	20.80	250	90
ACO250-240S-250	90-264	230	1.19	24	10.4	250	91
ACO250-280S-250	90-264	230	1.19	28	8.93	250	91
ACO250-360S-250	90-264	230	1.19	36	6.44	250	91
ACO250-480S-250	90-264	230	1.19	48	5.20	250	91

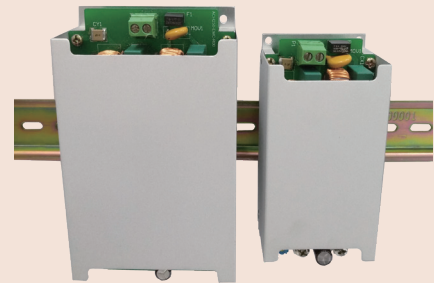
AC/DC PSU Series Product Feature

AC/DC Converter- PSU Series

- 90~264VAC full range input
Built-in EMI filter meets EN55032 Class B without external components
- Wide Operating Temperature:
-40~+100°C
- High Reliability: No aluminum and tantalum electrolytic capacitor inside
- Easy Hold-up time extension
- High density
- Provide cover baseplate · open-frame size optional
- Baseplate cooled
- AC-DC converter with PFC which is suitable for conduction cooling

- ACO700

(Coming Soon)



OCP

OVP

OTP

SCP

Model	Input			Output			Efficiency
	Voltage (V)		Current (A)	Voltage	Current	Power	
	Range	Nominal	Full load	(V)	(A)	(W)	Typ.(%)
ACO700-120S-700	90-264	230	3.38	12	58.33	700	90
ACO700-240S-700	90-264	230	3.38	24	29.17	700	90
ACO700-280S-700	90-264	230	3.38	28	25	700	90
ACO700-360S-700	90-264	230	3.38	36	19.44	700	90
ACO700-480S-700	90-264	230	3.38	48	15.58	700	90

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