



Medical Power Supplies

MEG-A Configurable



Medical



Automation



Semi
conductor

www.DeltaPSU.com





ABOUT DELTA

Delta, founded in 1971, is a global provider of power and thermal management solutions. Its mission statement, “To provide innovative, clean and energy-efficient solutions for a better tomorrow,” focuses on addressing key environmental issues such as global climate change. As an energy-saving solutions provider with core competencies in power electronics and automation, Delta’s business categories include Power Electronics, Automation, and Infrastructure.

In response to the challenge of climate change, Delta will remain committed to the research and development of innovative, energy-saving products, solutions and services that contributing substantially to the sustainable development of mankind.

BUSINESS CATEGORIES



Power Electronics

- Components
- Embedded Power
- Fan & Thermal Management
- Automotive Electronics
- Merchant & Mobile Power

Innervie



Automation

- Industrial Automation
- Building Automation



Infrastructure

- ICT Infrastructure
- Energy Infrastructure & Industrial

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DELTA
 Smarter. Greener. Together.

Delta Industrial and Medical Power Supplies

With more than 40 years of design and manufacturing experience, Delta's power supply products have been the first choice of top names of information, Netcom and consumer electronics equipment manufacturers for decades. To serve wider range of customers with world leading power electronics technology and manufacturing capability, we also provide industrial and medical-grade power supplies to fulfill the needs in factory automation, machine automation, process automation, test and measurement, building automation, food & beverage, LED lighting, medical equipment, and renewable power, maintaining Delta's consistent high-quality, high-stability, and high-performance. Close to the pulse of the market, Delta will continue to introduce new products to power the industrial and medical applications.

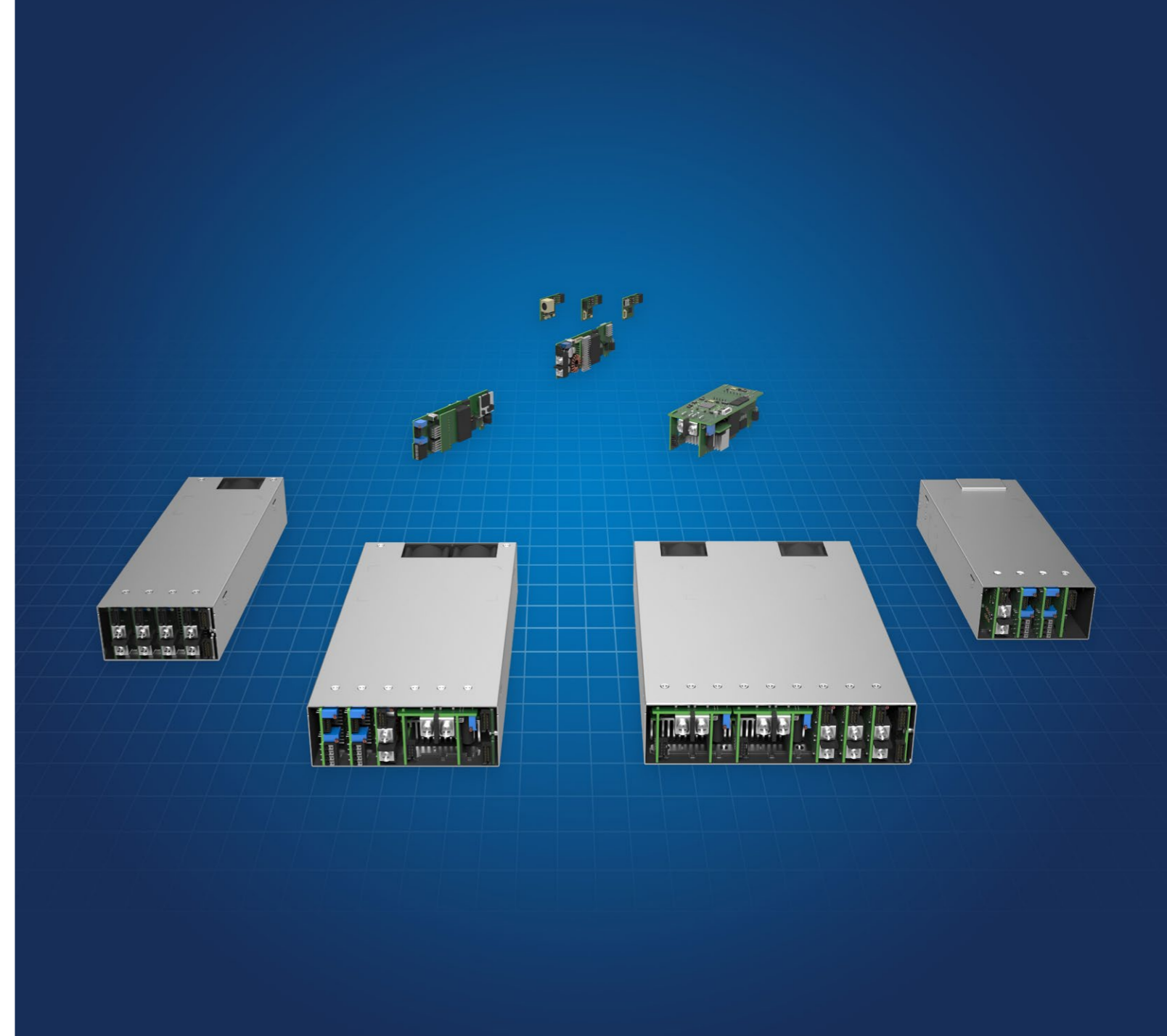


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Production Introduction

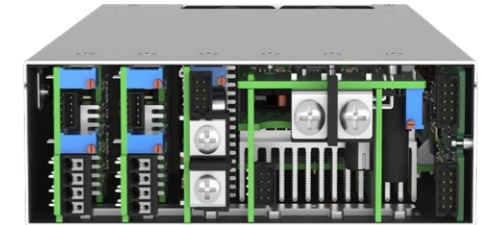
Delta has leveraged its rich development and manufacturing experience to develop the MEG-A series AC-DC configurable power supply. Their flexible modular design, 2V to 60V adjustable output voltage, and multiple sets of output power combinations make it possible for different configurations to satisfy different equipment requirements while also saving on space. With these power supplies, outputs can be monitored and adjusted accurately via various digital communication interfaces. Their intelligent and flexible design mean that that all of your needs can be met.



Flexible, Accurate, and Space-Saving

Supply Multiple Output

Replacing single-output power supplies, the MEG-A series power supply has up to 9 slots, providing multiple outputs to meet different equipment needs. They significantly reduce the number of power supplies required, which also improves space usage efficiency.



MEG-700A3

Max. 700W output, 3 slots



MEG-1K2A4

Max. 1200W output, 4 slots



MEG-2K1A6

Max. 2100W output, 6 slots

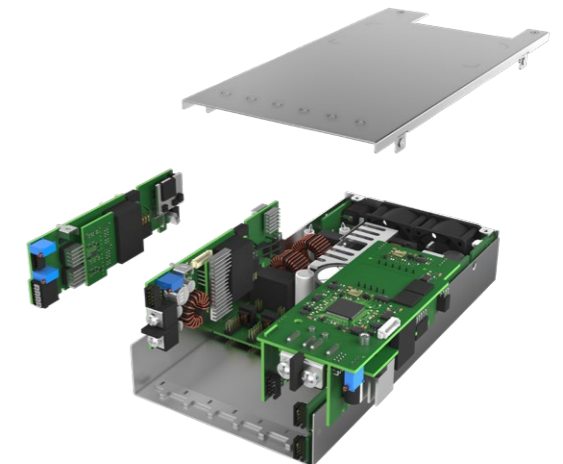


MEG-3K0A9

Max. 3000W output, 9 slots

Flexible Configuration

The modular design makes the MEG-A series flexible in application. A dedicated power supply can be assembled using optional fan direction, AC inlet type, or voltage—all according to the requirements of specific equipment or industrial environments, satisfying every type of condition.



Monitor and Adjust

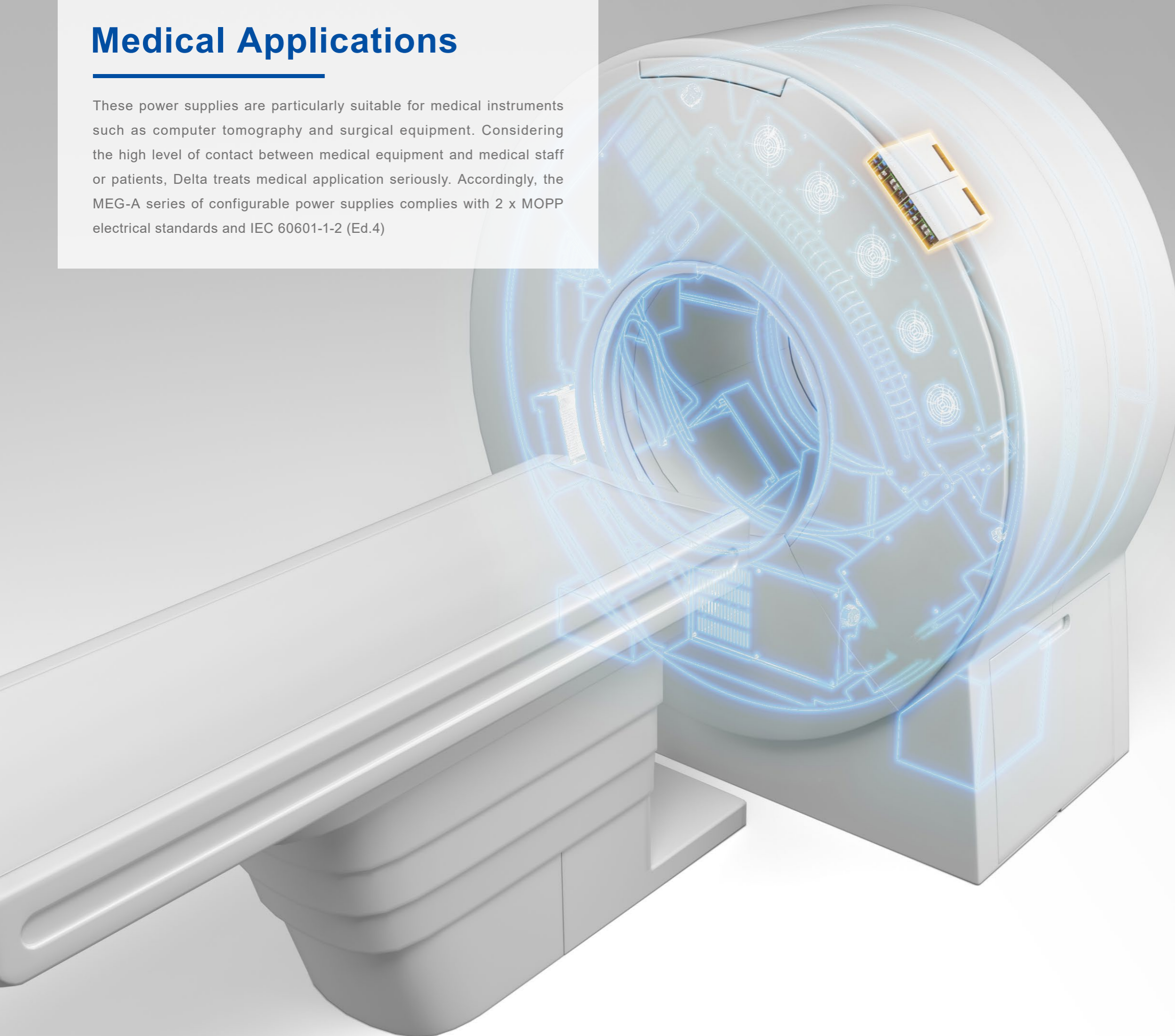
From an easy-to-use GUI system, you can easily monitor operating status and adjust the output voltage. These intelligent power supplies deliver optimal power efficiency.

*The MEG-700A3 does not support this function



Medical Applications

These power supplies are particularly suitable for medical instruments such as computer tomography and surgical equipment. Considering the high level of contact between medical equipment and medical staff or patients, Delta treats medical application seriously. Accordingly, the MEG-A series of configurable power supplies complies with 2 x MOPP electrical standards and IEC 60601-1-2 (Ed.4)



Computed Tomography



X-Ray Inspection



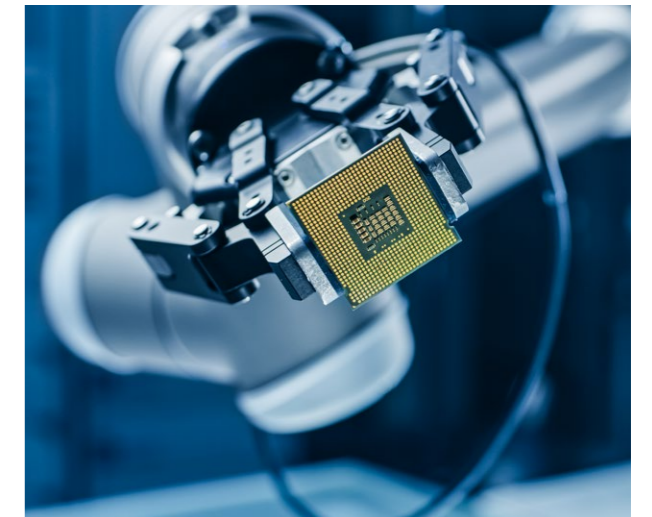
Surgical Equipment

Industry Applications

The power supply needs of high-precision industrial equipment such as semiconductor equipment include multiple outputs, compact size, and high stability. Delta's MEG-A series of configurable power supplies feature a 2V to 60V adjustable output voltage range and offer multiple outputs to help save on installation space in control cabinets. Optimal efficiency can be achieved through monitoring and adjusting parameters via various digital communication interfaces. Ensuring high reliability, the MEG-A series conforms to IEC 60950-1, IEC 62368-1 ITE safety, and SEMI F47 standards.



Laser Machine



Collaborative Robot



Semiconductor

Configurable Selections

The case, output modules, and communication interfaces can be selected flexibly and configured into literally thousands of combinations for a wide range of applications.

Case

The output power is determined by the case. Delta's MEG-A series has four different case models from 700 to 3000W to satisfy a wide variety of applications.



MEG-700A3 (3 slots)



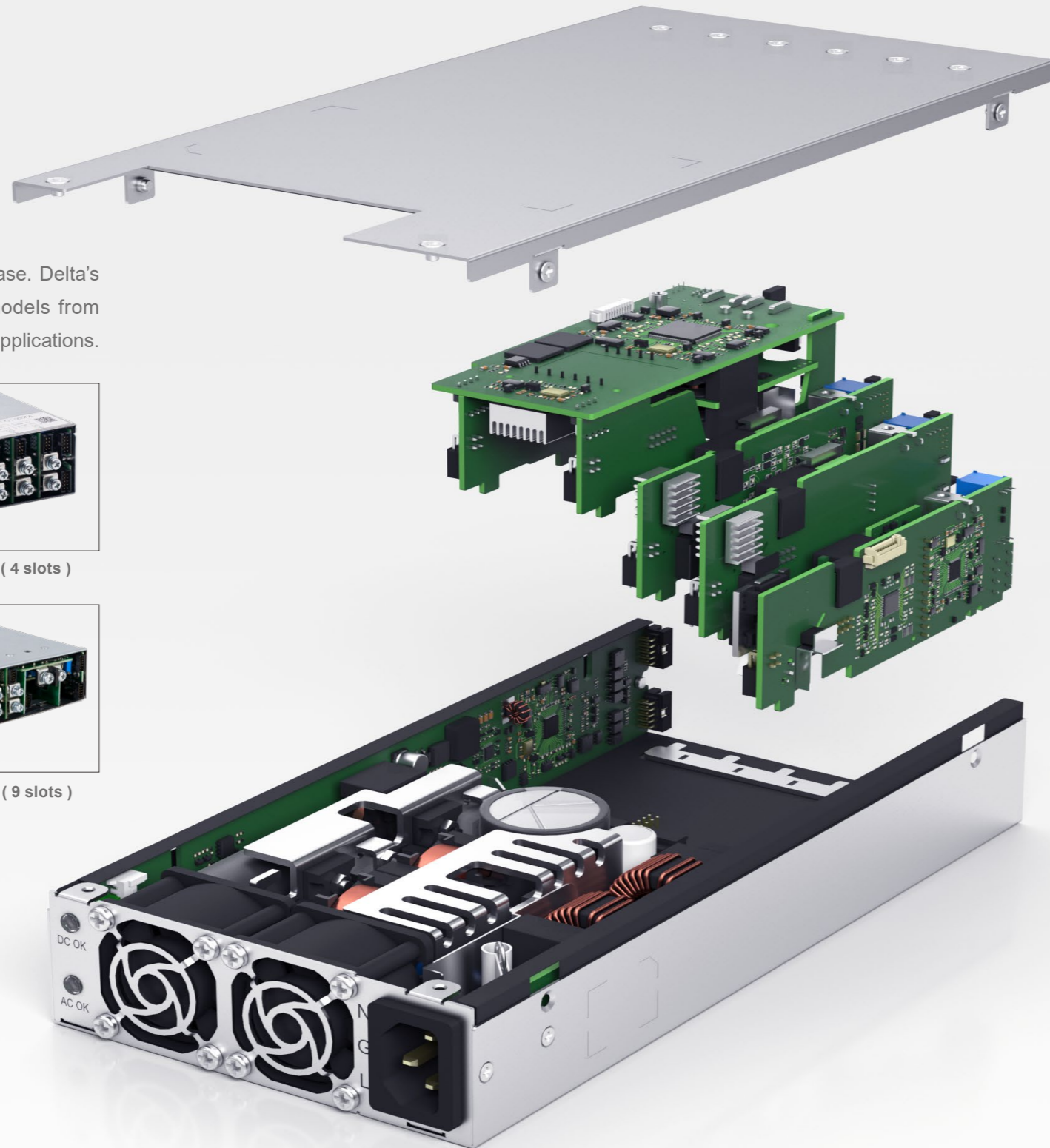
MEG-1K2A4 (4 slots)



MEG-2K1A6 (6 slots)

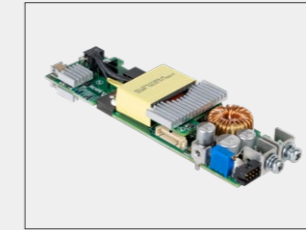


MEG-3K0A9 (9 slots)

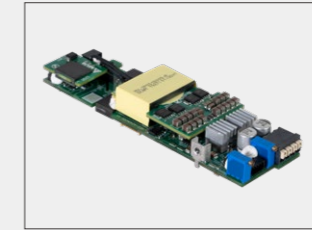


Output Module

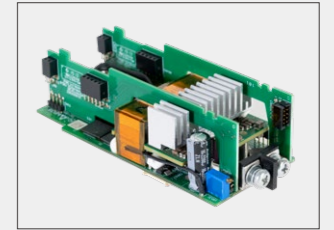
The output module plays a core role in the MEG-A series of configurable power supplies. Delta provides three types of output module, making a multitude of configurations possible.



Single Slot Module
(Max. 300W output)



Single Slot Dual-Output Module
(Max. 240W output)



Triple Slot Module
(Max. 1200W output)

Communication*

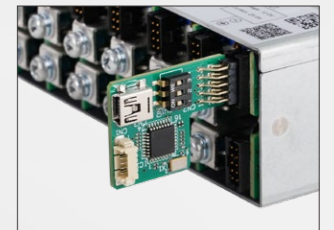
The default communication interface is PMBus, but RS-485, RS-232, and USB are also available. This ensures smooth communication for monitoring and configuring parameters to achieve high-efficiency power usage.



RS-232



RS-485



USB

*MEG-700A3 does not support communication function

AC Inlet

EU terminal block, US terminal block, and C14 Connector are available. Select the most suitable AC inlet according to the environment.



European Terminal Block



American Terminal Block



C14 Connector*

*MEG-3K0A9 uses the C22 Connector

MEG-A Series Features



3000W
Max. output power



1200W
Max. module output power



27W/inch³
Max. power density



-20°C ~ +70°C
Wide operating temperature range



Max. 50°C
Full power operation temperature



IEC 62368-1
ITE safety certification



2 x MOPP
Patient protection



SEMI F47
Compliance



IEC 60601-1
Medical safety certification



Isolated
Module output

Digital Communication

Monitor real-time operating status and adjust the output voltage via a GUI system. Digital communication helps achieve the optimal power usage efficiency.



- ✓ Adjustable output voltage
- ✓ Monitor input voltage
- ✓ Monitor fan speed
- ✓ Monitor ambient temperature

Output Voltage Selection

Adjustable 2V to 60V output voltage range with different modules and current configurations allows the MEG-A series to satisfy a comprehensive range of power requirements for different types of equipment.

Voltage Code		Current Code					
		Single Slot Module		Triple Slot Module*		Single Slot Dual Outputs Module*	
Code	Voltage	1		2			
		Current	Power	Current	Power	V1 or V2 Current	V1 or V2 Power
A	2.0V	45.0A	90W	-	-		
B	2.4V	45.0A	108W	-	-		
C	3.0V	45.0A	135W	-	-		
D	3.3V	45.0A	149W	-	-	5.0A	16.5W
E	5.0V	45.0A	225W	-	-	5.0A	25W
F	5.5V	45.0A	248W	-	-	5.0A	27.5W
G	6.0V	42.0A	252W	-	-	5.0A	30W
H	8.0V	25.0A	200W	100.0A	800W	5.0A	40W
I	10.0V	25.0A	250W	100.0A	1000W	5.0A	50W
J	12.0V	25.0A	300W	100.0A	1200W	5.0A	60W
K	14.0V	21.4A	300W	85.7A	1200W	5.0A	70W
L	15.0V	20.0A	300W	73.3A	1100W	5.0A	75W
M	18.0V	16.7A	300W	61.1A	1100W	5.0A	90W
N	20.0V	15.0A	300W	53.0A	1060W	5.0A	100W
O	24.0V	12.5A	300W	50.0A	1200W	4.0A	96W
P	28.0V	10.7A	300W	42.8A	1200W	4.0A	112W
Q	30.0V	10.0A	300W	33.3A	1000W	4.0A	120W
R	32.0V	9.4A	300W	34.4A	1100W		
S	36.0V	8.3A	300W	33.3A	1200W		
T	42.0V	7.1A	300W	28.6A	1200W		
U	48.0V	6.3A	300W	25.0A	1200W		
V	54.0V	5.5A	300W	22.2A	1200W		
W	60.0V	5.0A	300W	20.0A	1200W		

*The MEG-700A3 supports a maximum overall output of 700W. Refer to the specifications for further details.

Flexible, Reliable, and Powerful Intelligent AC-DC Configurable Power Supply

Delta's configurable power supplies support a maximum of 3000W of output power. Adjustable 2V to 60V output voltage with selectable components makes it possible to configure literally thousands of combinations. Supports multiple outputs simultaneously, reducing the space required for power supplies.



Note: Please have professionals perform power configuration

Specification

Model Name	MEG-700A3	MEG-1K2A4	MEG-2K1A6	MEG-3K0A9	
Input					
Input Voltage Range	90-264Vac				
Input Frequency Range	47-63Hz				
Input Current (Max.)	8.5A	8.5A	15A	20A	
Full load Efficiency (Typ.)	91% @ 115Vac / 60Hz 93% @ 230Vac / 50Hz	90% @ 115Vac / 60Hz 93% @ 230Vac / 50Hz	90% @ 115Vac / 60Hz 93% @ 230Vac / 50Hz	90% @ 115Vac / 60Hz 93% @ 230Vac / 50Hz	
Inrush Current (Max.)	40A @ 230Vac, cold start				
Power Factor (Min.) @115V/60Hz, 230V/50Hz, full load	> 0.95				
Output					
Total Regulation	±3%				
Output Slot	3	4	6	9	
Output Power	Single slot module	Up to 300W	Up to 300W	Up to 300W	Up to 300W
	Triple slot module	700W	1200W	1200W	1200W
	Total output (Max.)	700W	1200W	2100W	3000W
Low Input Voltage Derating @ 90Vac	700W	640W	1050W	1500W	
Output Voltage Trimming Range	±10% of module rated output voltage				
Line Regulation (Max.)	±0.5%				
Load Regulation (Max.)	±1%				
Ripple & Noise (Typ.)	1% pk-pk Vrated or 100mV, which is greater				
Start-up Time (Max.)	3000ms @ 115Vac				
Hold-up Time, with nominal input range (Min.)	12ms @ rated load	12ms @ rated load 20ms @ 640W load	12ms @ rated load 20ms @ 1200W load	12ms @ rated load 20ms @ 1500W load	
Dynamic Response (Overshoot & Undershoot O/P Voltage)	±5% @ 50-100% load change	±5% @ 50-100% load change ±6% @ 50-100% load change for H2/I2/J2			
Rise Time (Max.)	100ms				
Standby Ratings					
Nominal Output Voltage	5V				
Nominal Output Current	2A	2A	1A	2A	
Total Regulation	±3%				
Ripple & Noise	100mV max				
Mechanical					
Case Material	Metal Case				
Dimension (L x W x H)	215.9 x 88.9 x 41.5 mm (8.5 x 3.5 x 1.6 inch)	254 x 88.9 x 40.5 mm (10 x 3.5 x 1.59 inch)	254 x 127 x 40.5 mm (10 x 5 x 1.59 inch)	254 x 181 x 40.5 mm (10 x 7.13 x 1.59 inch)	
Unit Weight	0.8 kg	1.3 kg	2 kg	2.5 kg	
Fan Direction	Normal direction	Normal & Reverse direction		Normal direction	

Model Name	MEG-700A3	MEG-1K2A4	MEG-2K1A6	MEG-3K0A9
Environment				
Operating Temperature	-20°C to +70°C. Power derating linearly to 50% power under 70°C			
Storage Temperature	-40°C to +85°C			
Operating Humidity	5 - 90% RH (Non-Condensing)			
Operating Altitude	Up to 5000 meters			
Reliability Data				
MTBF based on Telecordia SR-332	>500kHrs 160Vac, 35°C	>500kHrs 160Vac, 35°C	>500kHrs 160Vac, 35°C	>500kHrs 180Vac, 35°C
Operating Life	3 years at 160Vac, 25°C	3 years at 160Vac, 25°C	3 years at 160Vac, 25°C	3 years at 180Vac, 25°C

Safety Certification

Medical Safety	IEC 60601-1 Ed.2 and Ed.3 + A1 edition, CB report TUV EN 60601-1:2006 ANSI/AAMI ES 60601-1 + CAN/CSA-C22.2 No. 60601-1: (Ed.3.2005)
ITE Safety	IEC 60950-1 CB report IEC 62368-1 CB report TUV EN 62368-1 UL 62368-1 and CAN/CSA C22.2 No. 62368-1 GB 4943.1-2011, GB 9254-2008, GB 17625.1-2012
CE	MDD Directive 93/42/EEC



*Please refer to the datasheet of each model for details on safety certifications.

Configurable Power Selector



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