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POWER ! FOR A BETTER FUTURE

 **MINMAX®** PRODUCT LINE PORTFOLIO
2021

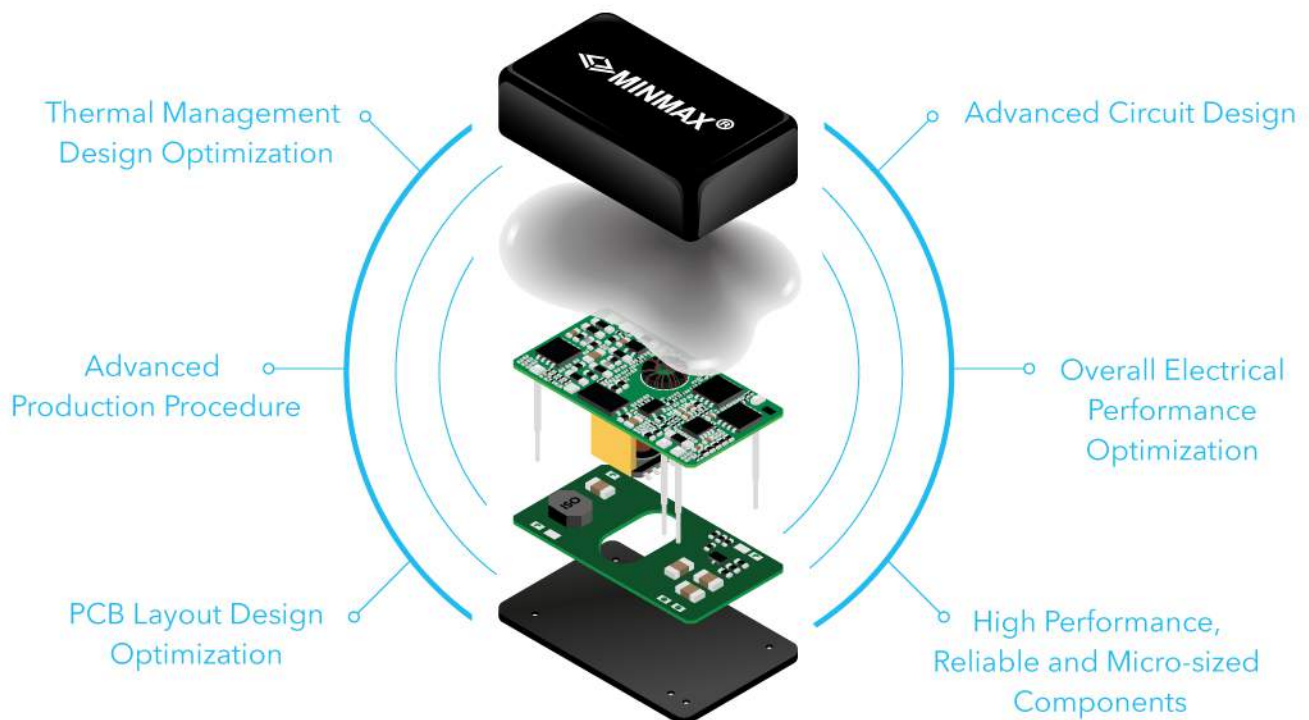


ABOUT MINMAX

In the three decades since MINMAX was established in 1990, we have prided ourselves on providing our customers with products and excellent service in a timely way. Our adherence to the best quality standards has also helped MINMAX win customers' hearts and become a preferred business partner.

"Power for a Better Future" We want MINMAX to be better than ever and to focus on the future. We hope MINMAX can work closely with all of our customers, materials suppliers, and employees. Our long-term partnership will help all of us move toward a brighter future, together.

OUR ADVANTAGES



GENERAL INDUSTRIAL POWER SOLUTIONS

1-5W	SIP Package DC-DC Converters	04
1-6W	SMD Package DC-DC Converters	04
1-15W	DIP Package DC-DC Converters	05
10-30W	1"×1" Package DC-DC Converters	05
40-50W	2"×1" Package DC-DC Converters	06
6-60W	Chassis & DIN-Rail Mounting DC-DC Converters	06
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3-60W	Encapsulated Package AC-DC Power Supplies	07

ULTRA-HIGH ISOLATION POWER SOLUTIONS

1-2W	SIP Package DC-DC Converters	09
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15-20W	2"×1" Package DC-DC Converters	09
6-60W	Chassis & DIN-Rail Mounting DC-DC Converters	09

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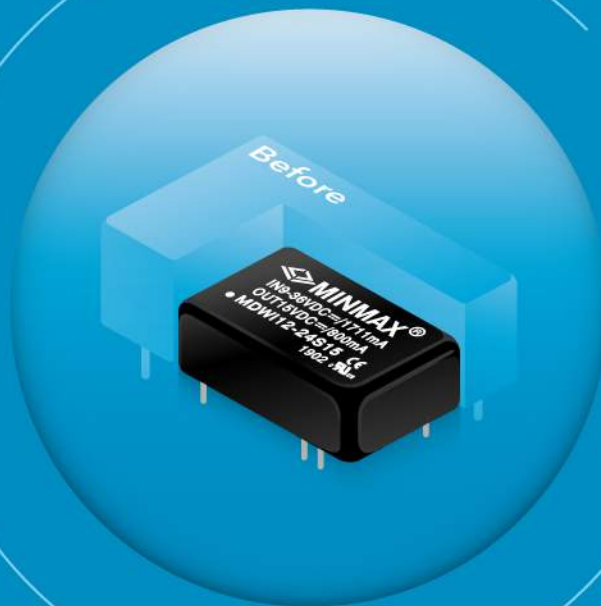
MEDICAL SAFETY POWER SOLUTIONS

1W	SIP Package DC-DC Converters	13
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GENERAL INDUSTRIAL POWER SOLUTIONS

75%
Board Space

79%
Weight



Power Density
4x UP



1-5W · SIP PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OCP	SCP	Remote ON/OFF Control	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MBU100	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15	1000	80%	-40~+85°C			SIP-4					
MAU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	1000	81%	-40~+85°C			SIP-7				•	
MAU200	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	3000	81%	-40~+90°C			SIP-7				•	
MAPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	3000	84%	-40~+90°C			SIP-7		•		•	•
MAW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	1500	80%	-40~+95°C	•	•	SIP-6	•	•		•	•
MAPU02H	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	3000	82%	-40~+90°C			SIP-7		•			
MCW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12	1000	81%	-40~+85°C	•		SIP-8	•	•	•	•	•
MCWI02	2W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	82%	-40~+90°C	•	•	SIP-8	•	•	•	•	•
NEW MBSU03	3W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	1500	86%	-40~+75°C			SIP-4		•			•
NEW MCW04	4W	9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	1600	86%	-40~+85°C	•	•	SIP-8	•	•	•		•
NEW MCWI04	4W	9-36, 18-75	5, 12, 15, 24, ±12, ±15	1600	83%	-40~+85°C	•	•	SIP-8	•	•	•	•	•
MCWI05	5W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	84%	-40~+75°C	•	•	SIP-8	•	•	•	•	•



1-6W · SMD PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	SCP	OCP	Remote ON/OFF Control	Water-washable Process Available	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MSLU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	1500	80%	-40~+90°C						•	•	•
MSLU300	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, ±5, ±12, ±15	3000	81%	-40~+90°C						•		
MSPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2	3.3, 5, 12, 15, ±5, ±12, ±15	3000	85%	-40~+85°C			•	•		•	•	•
MSCW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, ±12, ±15	1500	82%	-40~+85°C	•	•	•	•	•	•	•	•
MSLU400	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, ±5, ±12, ±15	1500	80%	-40~+92°C						•		
MSDW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	81%	-40~+85°C	•		•			•	•	
MSCWI02	2W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	1500	85%	-40~+80°C	•	•	•	•	•	•	•	•
MSCWI03	3W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	1500	85%	-40~+80°C	•	•	•	•	•	•	•	•
MSGWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500	83%	-40~+80°C	•		•	•	•	•	•	•

* Qualified to IPC/JEDEC J-STD-020D.1

* Tape & Reel Package Available

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL · DC-DC CONVERTERS



1-15W · DIP PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OC/SCP	Remote ON/OFF Control	U/cUL/IEC/EN 62368-1
MFSU01	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	1500	83%	-40~+85°C			DIP-8	SCP		
MFFU01H	1W	2.97-3.63, 4.5-5.5, 9-18, 18-36	3.3, 5, 12, 15, ±5, ±12, ±15	3000	83%	-40~+90°C			DIP-8	•		•
MFW02	2W	36-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	87%	-40~+80°C	•	•	DIP-8	•		•
MFW03	3W	10.8-13.2	3.3, 5, 12, 15, ±5, ±12, ±15	1500	87%	-40~+80°C	•	•	DIP-8	•		•
MDWI03	3W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500	80%	-40~+85°C	•		DIP-16	•	•	•
MIW03	3W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500/3000	85%	-40~+85°C	•	•	DIP-24	•	•	•
MIWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500/3000	84%	-40~+85°C	•	•	DIP-24	•		•
MDWI06	6W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	87%	-40~+90°C	•	•	DIP-16	•		•
MIW06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500/3000	84%	-40~+85°C	•	•	DIP-24	•		•
MIWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500/3000	84%	-40~+90°C	•	•	DIP-24	•		•
MDW08	8W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	86%	-40~+80°C	•	•	DIP-16	•		•
MDWI08	8W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	86%	-40~+80°C	•	•	DIP-16	•		•
NEW MDW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+88°C	•	•	DIP-16	•		•
NEW MDWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+88°C	•	•	DIP-16	•		•
MIW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±12, ±15	1500	89%	-40~+85°C	•	•	DIP-24	•	•	•
MIWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+88°C	•	•	DIP-24	•	•	•
NEW MDW12	12W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+85°C	•	•	DIP-16	•		•
NEW MDWI12	12W	9-36, 18-75	5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+85°C	•	•	DIP-16	•		•
NEW MDW15	15W	9-18, 18-36, 36-75	5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+85°C	•	•	DIP-16	•		•
NEW MDWI15	15W	9-36, 18-75	5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+85°C	•	•	DIP-16	•		•



10-30W · 1"×1" PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	OC/SCP	OVP	Remote ON/OFF Control	Output Voltage Trim	U/cUL/IEC/EN 62368-1
MJW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±5, ±12, ±15	1500	89%	-40~+80°C	•	•	•	•	•	•	•
MJWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±5, ±12, ±15	1500	87%	-40~+80°C	•		•	•	•	•	•
MJW15	15W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	91%	-40~+90°C	•	•	•	•	•	•	•
MJWI15	15W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	91%	-40~+90°C	•	•	•	•	•	•	•
MJWI20	20W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	89%	-40~+85°C	•	•	•	•	•	•	•
MJW25	25W	9-18, 18-36, 36-75	3.3, 5, 12, 15, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•
MJWI25	25W	9-36, 18-75	3.3, 5, 12, 15, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•
NEW MJWI30	30W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet



40-50W · 2"×1" PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OC/SCP	OVP/OTP	Remote ON/OFF Control	Output Voltage Trim	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MKW40	40W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	92%	-40~+80°C	•	•	2"×1"	•	•	•	•	•	•
MKW140	40W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	91%	-40~+80°C	•	•	2"×1"	•	•	•	•	•	•
MKW50	50W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24	1500	92%	-40~+80°C	•	•	2"×1"	•	•	•	•	•	•
MKW150	50W	9-36, 18-75	3.3, 5, 12, 15, 24	1500	92%	-40~+80°C	•	•	2"×1"	•	•	•	•	•	•



6-60W · CHASSIS & DIN-RAIL MOUNTING



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OC/SCP	OVP	Remote ON/OFF Control	UL/cUL/IEC/EN 62368-1
NEW MJWI06C	6W	9-36, 18-75	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VDC	85%	-40~+92.5°C	•	•	Chassis DIN-Rail	•		•	•
NEW MKWI10C	10W	9-36, 18-75	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VDC	86%	-40~+92.5°C	•	•	Chassis DIN-Rail	•		•	•
MOWI20C	20W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	91%	-40~+90°C	•	•	Chassis DIN-Rail	•	•	•	•
MQWI40C	40W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	92%	-40~+85°C	•	•	Chassis DIN-Rail	•	•	•	•
MRWI60C	60W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	92%	-40~+85°C	•	•	Chassis DIN-Rail	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL · DC-DC CONVERTERS



0.5-1A · SWITCHING REGULATORS



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Efficiency	Operating Ambient Temp. Range (°C)	Output Regulation	No Min. Load	Package	OTP	SCP	Remote ON/OFF Control	Output Voltage Trim
M78AR-0.5	0.5A	4.75-32	1.5, 1.8, 2.5, 3.3	91%	-40~+90°C	•	•	SIP-3	•	•		
		6.5-32	5	94%	-40~+90°C	•	•	SIP-3	•	•		
		8-32	6.5	95%	-40~+90°C	•	•	SIP-3	•	•		
		11-32	9	96%	-40~+90°C	•	•	SIP-3	•	•		
		15-32	12	97%	-40~+90°C	•	•	SIP-3	•	•		
		18-32	15	97%	-40~+90°C	•	•	SIP-3	•	•		
M78SAR-0.5	0.5A	4.75-32	1.5, 1.8, 2.5, 3.3	91%	-40~+90°C	•	•	SMD	•	•	•	•
		6.5-32	5	94%	-40~+90°C	•	•	SMD	•	•	•	•
		8-32	6.5	95%	-40~+90°C	•	•	SMD	•	•	•	•
		11-32	9	96%	-40~+90°C	•	•	SMD	•	•	•	•
		15-32	12	97%	-40~+90°C	•	•	SMD	•	•	•	•
		18-32	15	97%	-40~+90°C	•	•	SMD	•	•	•	•
M78AR-1	1A	6.5-32	3.3	93%	-40~+85°C	•	•	SIP-3	•	•		
		6.5-32	5	94%	-40~+85°C	•	•	SIP-3	•	•		
		15-32	12	96%	-40~+85°C	•	•	SIP-3	•	•		

GENERAL INDUSTRIAL · AC-DC POWER SUPPLIES



3-60W · ENCAPSULATED PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range (°C)	Output Regulation	No Min. Load	Package	Case Size (inches)	TUV/IEC/EN 60335-1	UL/cUL/IEC/EN 62368-1	SCP/OCF/OPP
AAF-03	3W	85-264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24	3000VAC Reinforced	78%	-25°C~+70°C	•	•	PCB	1.0×1.0×0.64"	•	•	•
ABF-04	4W	85-264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 5/3.3, 12/5, ±12, ±15	3000VAC Reinforced	77%	-25°C~+60°C	•	•	PCB	1.44×1.06×0.67"	•	•	•
AAF-05	5W	85-264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	3000VAC Reinforced	85%	-25°C~+70°C	•	•	PCB Chassis	1.0×1.0×0.64" 1.65×1.02×0.76"	•	•	•
ADF-07	7W	85-264VAC 120-370VDC	3.3, 5, 12, 15, 24	3000VAC Reinforced	78%	-25°C~+70°C	•	•	PCB	2.0×1.0×0.77"	•	•	•
ACF-10	10W	85-264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	3000VAC Reinforced	86%	-25°C~+70°C	•	•	PCB	1.52×1.0×0.62"	•	•	•
NEW AGF-15	15W	85-264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	3000VAC Reinforced	84%	-25°C~+70°C	•	•	PCB	2.06×1.07×0.93"	•	•	•
NEW AMF-15	15W	85-264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000VAC Reinforced	84%	-40°C~+70°C	•	•	PCB Chassis & DIN-Rail	2.06×1.07×0.93" 2.89×1.18×1.06"	•	•	•
NEW AMF-30	30W	85-264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000VAC Reinforced	88%	-40°C~+70°C	•	•	PCB Chassis & DIN-Rail	2.52×1.77×0.94" 3.39×1.85×1.17"	•	•	•
NEW AMF-60	60W	85-264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000VAC Reinforced	89%	-40°C~+70°C	•	•	PCB Chassis & DIN-Rail	2.99×2.13×1.10" 4.02×2.28×1.34"	•	•	•

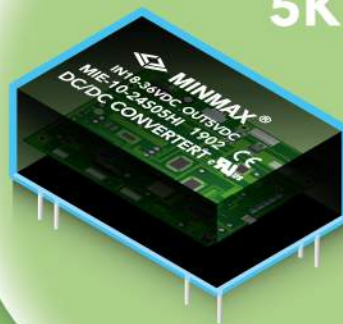
Please refer to derating curve information from datasheet

ULTRA-HIGH ISOLATION

POWER SOLUTIONS

Isolation
5K VAC / 60sec

Input ▶▶▶▶



▶▶▶▶ Output

Reinforced
Insulation

ULTRA-HIGH ISOLATION · DC-DC CONVERTERS



**1-60W · SIP · DIP · 2"×1" PACKAGE ·
CHASSIS & DIN-RAIL**



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation	Working Voltage	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	OCP	OVP	SCP	UL/cUL/IEC/EN 62368-1
1-2W · SIP Package													
MA01-HI	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15, +15/-9	5200VDC		80%	-40~+90°C					•	•
NEW MAEU01-HI	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	3000VAC Reinforced	480 Vrms	81%	-40~+95°C					•	•
MAEU02-HI	2W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15, +15/-9	5200VDC		85%	-40~+85°C						•
NEW MSCEU01-HI	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	3000VAC Reinforced	480 Vrms	84%	-40~+95°C					•	•
2-10W · DIP Package													
MDEU02-HI	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	4000VAC Reinforced	300 Vrms	75%	-25~+80°C						•
MIE03-HI	3.5W	4.5-9, 9-18, 18-36, 36-75	5, 5.8, 12, 15, 24, ±12, ±15	5000VAC Reinforced	1000 Vrms	87%	-40~+96°C	•	•	•	•	•	•
MIE06-HI	6W	9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	5000VAC Reinforced	1000 Vrms	89%	-40~+95°C	•	•	•	•	•	•
MIE10-HI	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	5000VAC Reinforced	1000 Vrms	88%	-40~+90°C	•	•	•	•	•	•
15-20W · 2"×1" Package													
MKE15-HI	15W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	4200VAC Reinforced	1000 Vrms	90%	-40~+90°C	•	•	•	•	•	•
MKE20-HI	20W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	4200VAC Reinforced	1000 Vrms	90%	-40~+85°C	•	•	•	•	•	•
6-60W · Chassis & DIN-Rail Mounting													
NEW MJA06C	6W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VAC Reinforced	1000 Vrms	84%	-40~+92.5°C	•	•	•		•	•
NEW MKA10C	10W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VAC Reinforced	1000 Vrms	85%	-40~+87°C	•	•	•		•	•
NEW MOA20C	20W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VAC Reinforced	1000 Vrms	88%	-40~+94.5°C	•	•	•	•	•	•
NEW MQA40C	40W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VAC Reinforced	1000 Vrms	89%	-40~+90°C	•	•	•	•	•	•
NEW MRA60C	60W	80-160	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VAC Reinforced	1000 Vrms	89%	-40~+90.5°C	•	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet

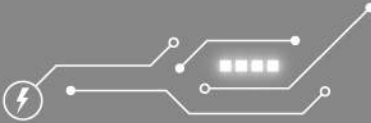


RAILWAY CERTIFIED

POWER SOLUTIONS

RAILWAY CERTIFIED
EN 50155

EN 45545-2



3-150W · DIP · 2"×1"PACKAGE · QUARTER BRICK

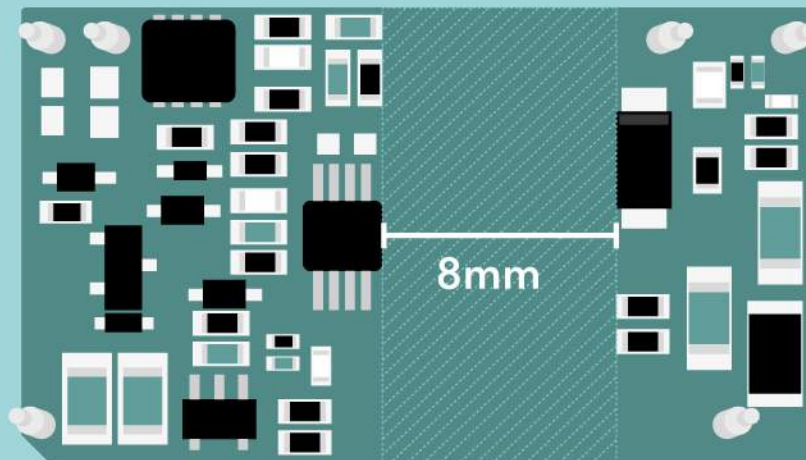


Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	No Min. Load	OC/SCP	OVP	OTP	Remote ON/OFF Control	Output Voltage Trim	Output Sense	EN50155 (IEC60571)	UL/cUL/IEC/EN 62368-1
3W · DIP Package															
MIZI03	3W	9-36, 18-75, 40-160	5, 12, 15, ±12, ±15	3000VAC Reinforced	85%	-40~+92°C Ambient	•	•						•	•
10-40W · 2"×1" Package															
MKZI10	10W	9-36, 18-75, 40-160	5, 12, 15, 24, ±12, ±15	3000VAC Reinforced	89%	-40~+95°C Ambient	•	•	•		•	•		•	•
MKZI20	20W	9-36, 18-75, 40-160	5, 12, 15, 24, ±12, ±15	3000VAC Reinforced	88%	-40~+88.5°C Ambient	•	•	•		•	•		•	•
NEW MKZI40	40W	36-160	5, 12, 15, 24, 54, ±12, ±15	3000VAC Reinforced	90%	-40~+77.5°C Ambient	•	•	•		•	•		•	•
50-150W · Quarter Brick															
MTQZ50	50W	43-101, 66-160	5, 12, 15, 24	3000VAC Reinforced	92%	-40~+85°C Ambient	•	•	•	•	•	•	•	•	•
MTQZ75	75W	43-101, 66-160	5, 12, 15, 24	3000VAC Reinforced	92%	-40~+80°C Ambient	•	•	•	•	•	•	•	•	•
NEW MRZI100	100W	36-160 ⁽²⁾	5, 12, 15, 24, 54	2000VAC Reinforced	91.5%	-40~+105°C Base plate	•	•	•	•	•	•	•	•	•
NEW MRZI150	150W	36-160 ⁽²⁾	5, 12, 15, 24, 54	2000VAC Reinforced	90%	-40~+105°C Base plate	•	•	•	•	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet
⁽²⁾ Please refer to start-up voltage information from datasheet

MEDICAL SAFETY

POWER SOLUTIONS



IEC 60601-1 APPROVED



2 x MOPP

MEDICAL SAFETY · DC-DC CONVERTERS



1-20W · SIP · SMD · DIP · 2"×1" PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	SCP	OVP	OCV	Protection Level	ANSI/AAMI ES 60601-1	IEC/EN 60601-1 3 rd
1W · SIP Package														
MAU400	1W	4.5-5.5, 10.8-13.2	5, 12, 15, ±5, ±12, ±15	3000VAC Reinforced	75%	-25~+85°C						1xMOPP 2xMOOP	•	•
MAU01M	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	4000VAC Reinforced	81%	-40~+95°C						2xMOPP	•	•
1-2W · SMD Package														
MSCU01M	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	4000VAC Reinforced	84%	-40~+95°C						2xMOPP	•	•
MSHU100	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	4000VAC Reinforced	75%	-25~+80°C						1xMOPP 2xMOOP	•	•
2-10W · DIP Package														
MDHU100	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15, ±12, ±15	4000VAC Reinforced	75%	-25~+80°C						1xMOPP 2xMOOP	•	•
MIHW2000	3W	9-40, 18-80, 36-160	5, 12, ±12, ±15	4000VAC Reinforced	83%	-40~+85°C	•	•	•	•	•	1xMOPP 2xMOOP	•	•
MIW03M	3.5W	4.5-9, 9-18, 18-36, 36-75	5, 5.8, 12, 15, ±12, ±15	5000VAC Reinforced	87%	-40~+96°C	•	•	•	•	•	2xMOPP	•	•
MIW06M	6W	9-18, 18-36, 36-75	5, 12, 15, ±12, ±15	5000VAC Reinforced	89%	-40~+95°C	•	•	•	•	•	2xMOPP	•	•
MIW10M	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	5000VAC Reinforced	88%	-40~+90°C	•	•	•	•	•	2xMOPP	•	•
15-20W · 2"×1" Package														
MKW15M	15W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	4200VAC Reinforced	90%	-40~+85°C	•	•	•	•	•	2xMOPP	•	•
MKW20M	20W	9-18, 18-36, 36-75	5, 5.1, 12, 15, 24, ±12, ±15	4200VAC Reinforced	90%	-40~+80°C	•	•	•	•	•	2xMOPP	•	•

⁽¹⁾ Please refer to derating curve information from datasheet.



24-60W · ENCAPSULATED PACKAGE



Series	Output Power	Input Voltage Range (VAC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OC/SCP	OVP	Protection Level	ANSI/AAMI ES 60601-1	IEC/EN 60601-1 3 rd
AJM-24	24W	85-264	5, 9, 12, 15, 24, ±12 ±15	4000VAC Reinforced	85%	-40~+80°C	•	•	PCB, Chassis, DIN-Rail	•	•	2xMOPP	•	•
APM-40	40W	85-264	5, 12, 15, 24, ±12 ±15	4000VAC Reinforced	85%	-40~+80°C	•	•	PCB, Chassis, DIN-Rail	•	•	2xMOPP	•	•
AYM-60	60W	85-264	5.1, 12, 15, 24, 48	4000VAC Reinforced	88%	-40~+80°C	•	•	PCB, Chassis, DIN-Rail	•	•	2xMOPP	•	•

⁽¹⁾Please refer to derating curve information from datasheet.

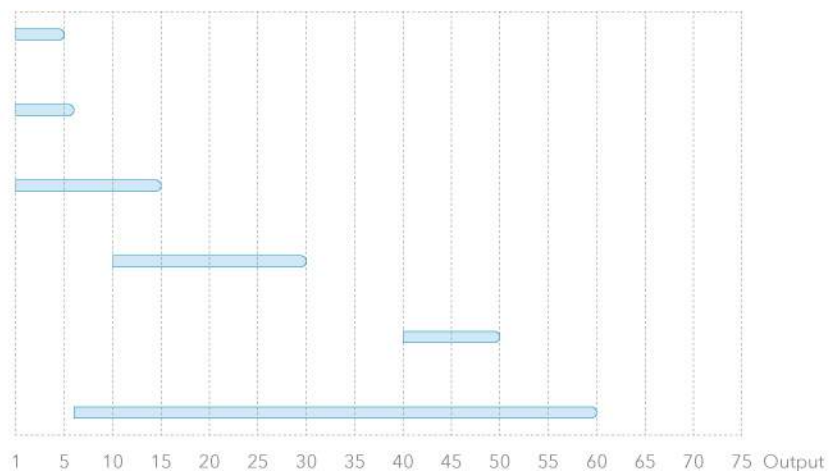


Our general industrial DC-DC converters are used in every corner of modern equipment & systems about everywhere.

We offer different electrical specifications and create competitive advantage performance to meet your critical design.

· DC-DC CONVERTERS

1-5W	SIP Package
1-6W	SMD Package
1-15W	DIP Package
10-30W	1"×1" Package
40-50W	2"×1" Package
6-60W	Chassis & DIN-Rail Mounting



· AC-DC POWER SUPPLIES

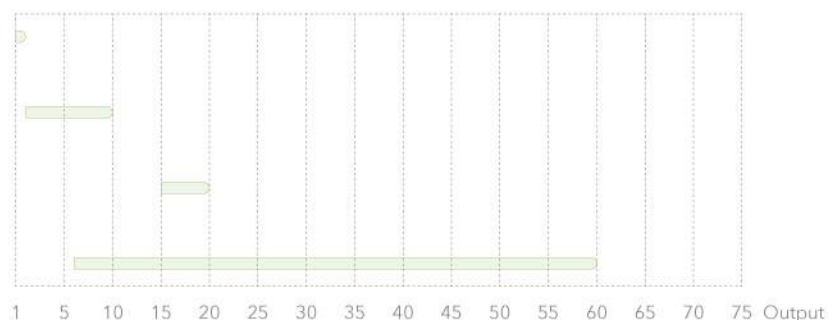
3-60W	Encapsulated Package
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Ultra-high isolation family equipped with very high common mode transient immunity with 15KV/ μ s qualifies and I/O isolation 4000 to 5000VAC with reinforced insulation, rated for 1000Vrms working voltage.

· DC-DC CONVERTERS

1-2W	SIP Package
2-10W	DIP Package
15-20W	2"×1" Package
6-60W	Chassis & DIN-Rail Mounting

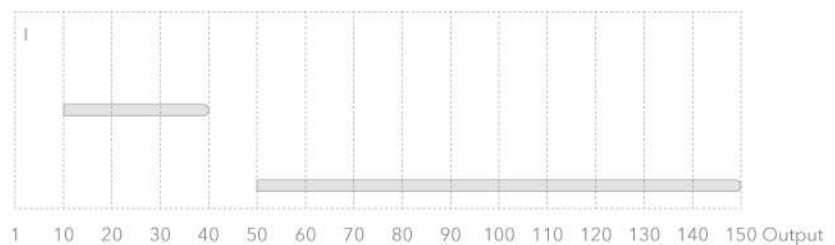




Our railway certified DC-DC converters are designed for stringent requirements and harsh environment. The products family are I/O isolation 3000 VAC with reinforced insulation. Furthermore, all railway products comply with EN 50155 certified and fire protection EN 45545-2 approval.

· DC-DC CONVERTERS

3W	DIP Package
10-40W	2"×1" Package
50-150W	Quarter Brick

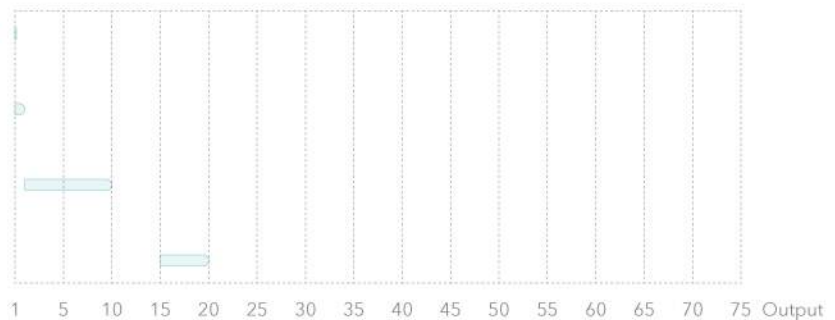


The medical grade DC-DC converters & AC-DC Power Supplies for demanding applications in both medical and healthcare instrumentations.

All medical products are approved to latest medical safety standards: ANSI/AAMI ES 60601-1, IEC/EN 60601-1 3rd edition with 2xMOPP/2xMOOP.

· DC-DC CONVERTERS

1W	SIP Package
1-2W	SMD Package
2-10W	DIP Package
15-20W	2"×1" Package



· AC-DC POWER SUPPLIES

24-60W	Encapsulated Package
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