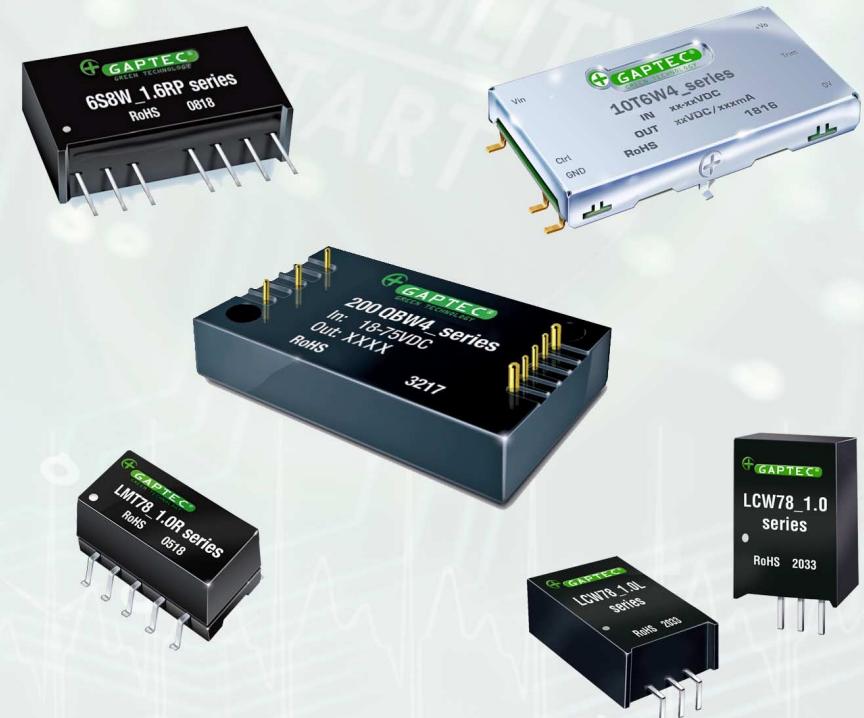


# Product Selection Guide 2022

AC-DC & DC-DC Converters - POL Switching Regulators - LED Drivers



## Transforming AC & DC Power Supplies

Innovative Designs - Premium Quality - Micro Size Converters - Custom Design - Certified Manufacturing



[www.gaptec-power.com](http://www.gaptec-power.com)

# GAPTEC - AC-DC and DC-DC power supply solutions

GAPTEC Electronic was founded in 2010 and focuses on market demands and serving the market's needs. It specializes in isolated and non-isolated voltage transformers (AC-DC, DC-DC, POL and LED drivers), supplying a selected range of converters and modules with typical isolation and industrial voltages as well as currently common terminal pin assignments. The portfolio ranges from 0.1 Watt up to 700 Watts (DC-DC) and from 1 Watt up to 1000 Watts (AC-DC).

ISO 9001:2015 certification, long-standing cooperation between certified manufacturing facilities in China and Taiwan and our development team together with our design engineers guarantees powerful and economical standard and custom-made products. A select product portfolio guarantees highest quality standards (UL62368, UL 60950, EN 50155, UL 60601) and maximum flexibility offering short lead-times at a low cost.

GAPTEC Electronic will continue to extend its product range tailored to the industrial electronics industry while keeping an eye out for new and innovative power-saving products. It guarantees the supply of all fully designed products well beyond the standard product cycle times. When re-ordering products, customers can rest assured that they will obtain a product that is 100% compatible and meets the same quality standard as the previously supplied unit. Any changes to the product design will be announced to customers at least six months in advance. Reliability is key - always.

-  Innovative Designs - Premium Quality - Micro Size Design
-  More than 30 years global power supply experience
-  Very short delivery times for most products (approx. 4-5 weeks)
-  Real second source for most common parts
-  UL approvals for a wide range of selected parts

# AC-DC converters - galvanic isolated

PCB mounted, DIN rail versions, housing and open frame

Our standard and custom designed AC-DC power converters are qualified by OEMs and used for municipal AC electric power systems, instrument and metering, communication and medical equipment. The modules provide universal input, high efficiency, high reliability, very low stand-by power and they are energy saving. Our AC-DC converters meet the most important requirements as far as operating temperature (-40°C up to +85°C), low ripple/noise, multiple protections, and they come with very small size dimensions. The parts provide universal input: 85VAC up to 528VAC or (100-745VDC) and isolation up to 4kVAC. GAPTEC Electronic offers customers short lead times and a 3-year warranty.



The new 1000 watts **1000ACPE\_CF4 series** is an enclosed AC-DC switching power supply. It features universal AC input and at the same time accepts DC input voltage, cost-effective, low no load power consumption, high efficiency, high reliability and double or reinforced insulation. These converters offer excellent EMC performance and meet IEC / EN61000-4, CISPR32 / EN55032, IEC / UL / EN62368, EN60335, EN60601, GB4943 standards and they are widely used in areas of industrial, LED, street light control, electricity, security, telecommunications, smart home. etc.

Dimensions: (190.0 x 127.0 x 40.5 mm).

## NEW: Feature series



### 5ACFEW\_3 series

Description:

Miniature open frame size power converter

- Case size: SIP open frame
- 3 kVDC isolation
- UL62368 certified
- Short circuit protection (SCP)
- Input range: 85~305VAC/70~430VDC

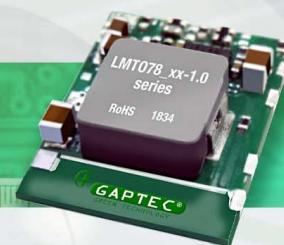


## AC-DC modules - INDUSTRIAL - 1 watt, 2 watt and 3 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1	1ACOS	SIP open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	5	Non-Isolated	-	-	57%	-40°C - +85°C	UL62368
2	2ACEW_4	DIP 33.7 x 22.2mm	wide	85-305VAC; 47-63Hz; 120-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	78%	-40°C - +70°C	UL62368
3	3ACOS	SIP Open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	12	Non-Isolated	-	-	57%	-40°C - +85°C	UL62368
3	3ACFEW_3	SIP Open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	3.3; 5; 9; 12; 15; 24	3kVAC	-	-	79%	-40°C - +85°C	UL62368
3	3ACEW_4	DIP 1"x1"	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	79%	-40°C - +85°C	UL62368
3	3ACE_4	DIP 37 x 24.5mm	wide	85-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	73%	-40°C - +70°C	UL62368
3	3ACMW_4	SIP Open frame	wide	90-528VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	76%	-40°C - +70°C	UL60950

LMT078 - Ultra Flat Design = 3.6 mm!



# AC-DC modules - INDUSTRIAL - 5 watt and 10 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
5	5ACDM_3	DIP 1"x1"	wide	90-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24; 48	3kVAC	-	-	85%	-40°C - +70°C	UL62368
5	5ACE_4	DIP 37 x 25.4mm	wide	90-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	81%	-40°C - +70°C	UL62368
5	5ACAW_4	DIP 53.8 x 28.8mm	wide	85-305VAC; 47-63Hz; 120-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	82%	-40°C - +70°C	UL62368
5	5ACBE_4	DIP 48.5 x 36mm	wide	85-264VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	81.5%	-40°C - +85°C	UL62368
5	5ACM_4	SIP14 Open frame	wide	85-264VAC; 47-63Hz; 70-400VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	79%	-40°C - +85°C	UL62368
5	5ACEW_4	DIP 1"x1"	wide	85-305VAC; 47-63Hz; 70-400VDC	3.3; 5; 9; 12; 15; 24	3kVAC	-	-	81%	-40°C - +85°C	UL62368
5	5ACFEW_3	SIP Open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	79%	-40°C - +85°C	UL62368
5	5ACOS	SIP Open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	12; 15; 18	Non-isolated	-	-	77%	-40°C - +70°C	
10	10ACFEW_3	SIP Open frame	wide	85-305VAC; 47-63Hz; 70-430VDC	3.3; 5; 9; 12; 15; 24	3kVAC	-	-	81%	-40°C - +70°C	UL62368
10	10ACBEW_4	DIP 55 x 45mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	-	-	82%	-40°C - +85°C	UL62368



## AC-DC modules - INDUSTRIAL - 10 watt, 15 watt and 20 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
10	10ACE_4	DIP 53.8 x 28.8mm	wide	85-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24	4kVAC	▪	▪	83%	-40°C - +85°C	UL62368
10	10ACEW_4	DIP 40 x 25.4mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	▪	▪	85%	-40°C - +85°C	UL62368
15	15ACEW_4	DIP 47.5 x 26.8mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	▪	▪	86%	-40°C - +85°C	UL62368
15	15ACBE_4	DIP 62 x 45mm	wide	85-264VAC; 47-63Hz; 100-370VDC	3.3; 5; 9; 12; 15; 24 ±5; ±12; ±15	4kVAC	▪	▪	83%	-40°C - +85°C	UL62368
15	15ACE_4	DIP 53.8 x 28.8mm	wide	85-264VAC; 47-63Hz; 100-370VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	81%	-40°C - +70°C	UL62368
15	15ACM_3	SIP Open frame	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	3kVAC	▪	▪	85%	-40°C - +85°C	UL62368
15	15ACBEW_4	DIP 62 x 45mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	85%	-40°C - +85°C	UL62368
20	20ACE_4	DIP 52.5 x 27.5mm	wide	90-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 12; 15; 24	4kVAC	▪	▪	83%	-40°C - +70°C	UL62368
20	20ACEW_4	DIP 52.4 x 27.2mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	4kVAC	▪	▪	87%	-40°C - +85°C	UL62368



## AC-DC modules - INDUSTRIAL - 25 watt, 40 watt, 45 watt and 60 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
25	25ACBE_4	DIP 70 x 48mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	87%	-40°C - +85°C	UL62368
25	25ACBEW_4	DIP 70 x 48mm	wide	90-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	87%	-40°C - +85°C	UL62368
30	30ACBEW_4	DIP 61.5 x 39mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	90%	-40°C - +85°C	UL62368
40	40ACBE_4	DIP 89 x 63.5mm	wide	85-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	84%	-40°C - +70°C	UL62368
40	40ACBEW_4	DIP 89 x 63.5mm	wide	85-305VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15; 24; 48	4kVAC	▪	▪	84%	-40°C - +80°C	UL62368
60	60ACAE_4	DIP 87 x 52mm	wide	90-264VAC; 47-63Hz; 120-370VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	87%	-40°C - +70°C	UL62368
60	60ACAEW_4	DIP 87 x 52mm	wide	90-264VAC; 47-63Hz; 100-430VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	93.5%	-30°C - +70°C	UL62368
60	60ACBE_4	DIP 96.32 x 58.5mm	wide	99-264VAC; 47-63Hz; 100-370VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	90%	-30°C - +70°C	UL62368
60	60ACBEW_4	DIP 96.32 x 58mm	wide	85-264VAC; 47-63Hz; 100-370VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	93.5%	-30°C - +70°C	UL62368

New  
20DMWE4  
Series

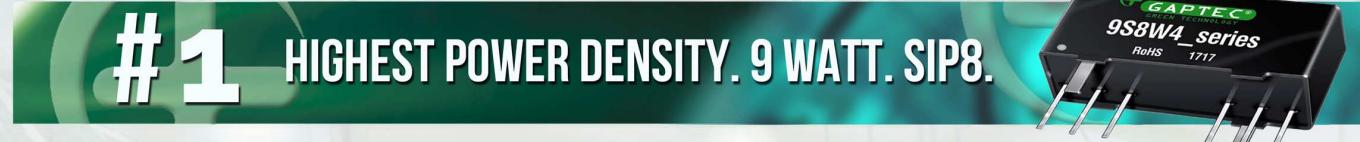


**20 watt cost effective series**  
High efficiency DC-DC converter in a 6-pin DIP package

## AC-DC modules - MEDICAL - 5 watt, 15 watt, 30 watt, 60 watt, 100 watt and 150 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
5	5ACMEA_4	52.5 x 27.5mm	wide	90-264VAC; 47-63Hz; 120-370VDC	5; 9; 12; 15; 24	4kVAC	-	-	83%	-25°C - +80°C	UL60950
15	15ACMEB_4	62.0 x 45.0mm	wide	85-264VAC; 47-63Hz; 120-370VDC	5; 9; 12; 15; 24	4kVAC	-	-	83%	-25°C - +85°C	UL60601
25	25ACMEW_4	62.0 x 45.0mm	wide	85-264VAC; 47-63Hz; 120-370VDC	5; 12; 15; 18; 24	4kVAC	-	-	89%	-40°C - +85°C	UL60601
30	30ACMEB_4	61.1 x 45.6mm	wide	85-264VAC; 47-63Hz; 120-370VDC	5; 12; 15; 24	4kVAC	-	-	83%	-25°C - +80°C	UL60601
60	60ACMEB_4	61.1 x 45.6mm	wide	90-264VAC; 47-63Hz; 120-370VDC	5; 9; 12; 15; 24	4kVAC	-	-	83%	-25°C - +70°C	UL60601
100	100ACMEA_4	109.0 x 58.8mm	wide	90-264VAC; 47-63Hz;	12; 15; 24; 48	4kVAC	-	-	86%	-30°C - +70°C	UL60601
100	100ACMEB_4	83.9 x 58.8mm	wide	90-264VAC; 47-63Hz;	12; 24; 48	4kVAC	-	-	87%	-30°C - +70°C	UL60601
150	150ACMEA_4	109.0 x 58.8mm	wide	85-264VAC; 47-63Hz;	12; 15; 24; 48	4kVAC	-	-	85%	-30°C - +70°C	UL60601



# AC-DC modules - POWER SUPPLY (MEDICAL) - 65, 180, 200, 280 and 360 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
65	65ACMOP	76.2 x 50.8 x 28.7mm	Wide	90-264VAC; 47-63Hz	5, 12; 15; 19, 20, 24, 28, 48, 56	4kVAC	▪	▪	87%	-20°C - +70°C	UL60601
180	180ACMOP	127 x 76.2 x 30mm	wide	90-264VAC; 47-63Hz	12; 15; 19, 24, 28, 48	4kVAC	▪	▪	87%	-20°C - +60°C	UL60601
200	200ACMUP	176 x 95 x 50mm	wide	90-264VAC; 47-63Hz;	12; 16; 19, 20, 24, 36, 48	4kVAC	▪	▪	87%	-20°C - +60°C	UL60601
280	280ACMOP	127 x 76.2 x 30mm	wide	90-264VAC; 47-63Hz;	12; 24, 28, 36, 48, 54	4kVAC	▪	▪	91%	-20°C - +70°C	UL60601
280	280ACMUP	127 x 83.2 x 38mm	wide	90-264VAC; 47-63Hz	12; 24, 28, 36, 48, 54	4kVAC	▪	▪	91%	-20°C - +70°C	UL60601
280	280ACMHP	127 x 83.2 x 39.5mm	wide	90-264VAC; 47-63Hz	12; 24, 28, 36, 48, 54	4kVAC	▪	▪	91%	-20°C - +70°C	UL60601
360	360ACMOP	152.4 x 101.6 x 30mm	wide	90-264VAC; 47-63Hz;	12; 24, 28, 48, 54	4kVAC	▪	▪	90%	-20°C - +70°C	UL60601
360	360ACMUP	203.2 x 118.5 x 42mm	wide	90-264VAC; 47-63Hz;	12; 24, 30, 36, 48, 54, 57	4kVAC	▪	▪	83%	-20°C - +70°C	UL60601



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## AC-DC modules - DIN RAIL (INDUSTRIAL) - 30, 60, 75, 100, 120, 150, 240, 480 and 960 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification	PFC
30	30ACDRS	92.66 x 58 x 35mm	Wide	85-264VAC; 47-63Hz 120-370VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	90%	-40°C - +70°C	UL62368	
60	60ACDRS	92.66 x 58 x 52mm	wide	85-264VAC; 47-63Hz; 120-370VDC	5; 12; 15; 24; 48	4kVAC	▪	▪	91%	-40°C - +70°C	UL62368	
75	75ACDRH	129.8 x 87.5 x 32mm	wide	85-264VAC; 47-63Hz; 120-370VDC	12; 24; 48	4kVAC	▪	▪	90%	-30°C - +70°C	UL61010	
100	100ACDRS	92.66 x 58 x 70mm	wide	85-264VAC; 47-63Hz; 120-370VDC	12; 15; 24; 48	4kVAC	▪	▪	90%	-40°C - +70°C	UL62368	
120	120ACDRH	128.82 x 110 x 32mm	Wide	85-264VAC; 47-63Hz; 120-370VDC	12; 24; 48	4kVAC	▪	▪	94%	-40°C - +70°C	UL62368	
150	150ACDR	89.12 x 58 x 105mm	Wide	85-264VAC; 47-63Hz 120-370VDC	12; 15; 24; 48	4kVAC	▪	▪	91%	-30°C - +70°C	UL62368	
240	240ACDRH_C	128 x 110 x 54mm	wide	85-264VAC; 47-63Hz 120-370VDC	12; 24; 48	3kVAC	▪	▪	94%	-40°C - +70°C	UL62368 UL61010	
480	480ACDRH_C	130.6 x 131.5 x 48mm	Wide	85-264VAC; 47-63Hz 120-370VDC	12; 24; 48	3kVAC	▪	▪	94%	-40°C - +70°C	UL62368 UL61010	
480	480ACDR_C	127 x 124 x 70mm	wide	85-264VAC; 47-63Hz; 130-350VDC	24; 48	3kVAC	▪	▪	93.8%	-25°C - +70°C	UL60950	
960	960ACDR_C	138.2 x 124.6 x 140mm	Wide	85-264VAC; 47-63Hz; 220-370VDC	24	3kVAC	▪	▪	94.4%	-25°C - +70°C		

## AC-DC modules - OFF BOARD (HOUSING) - 15, 25, 35, 50, 75, 100, 150 and 280 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification	PFC
15	15ACPW_4	65 x 55 x 25mm	wide	85-305VAC; 47-63Hz 100-430VDC	3.3; 5; 12; 15; 24; 48	4kVAC	▪	▪	83%	-30°C - +70°C	UL62368	
25	25ACPW_4	65 x 55 x 25mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 12; 15; 24; 48	4kVAC	▪	▪	83%	-30°C - +70°C	UL62368	
35	35ACPE_4	99 x 82 x 26mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 12; 15; 24	4kVAC	▪	▪	89%	-30°C - +70°C	UL62368	
35	35ACPW_4	92.5 x 82 x 26mm	wide	85-305VAC; 47-63Hz 100-430VDC	5; 12; 15; 24	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
50	50ACPE_4	92.5 x 82 x 30mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 12; 15; 24	4kVAC	▪	▪	90%	-30°C - +70°C	UL62368	
50	50ACPW_4	92.5 x 82 x 30mm	wide	85-305VAC; 47-63Hz 100-430VDC	5; 12; 15; 24	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
75	75ACPE_4	92.5 x 97 x 30mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 12; 15; 24	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
75	75ACPW_4	92.5 x 97 x 30mm	wide	85-305VAC; 47-63Hz; 100-430VDC	5; 12; 15; 24	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
100	100ACPE_4	122.5 x 97 x 30mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 12; 15; 24; 36; 48	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
100	100ACPW_4	122.5 x 97 x 30mm	wide	85-305VAC; 47-63Hz; 100-430VDC	5; 12; 15; 24; 36; 48	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
150	100ACPE_4	152.45 x 97 x 30mm	wide	85-264VAC; 47-63Hz; 120-370VDC	12; 15; 24; 36; 48	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
150	100ACPW_4	152.45 x 97 x 30mm	wide	85-305VAC; 47-63Hz; 100-430VDC	12; 15; 24; 36; 48	4kVAC	▪	▪	87%	-30°C - +70°C	UL62368	
225	225ACPE_4	65 x 55 x 25mm	wide	85-305VAC; 47-63Hz; 100-430VDC	12; 15; 24; 36; 48	4kVAC	▪	▪	94%	-30°C - +70°C	UL62368	
280	280ACMHP	127 x 83.2 x 39.5mm	wide	90-264VAC; 47-63Hz;	12, 24, 28, 36, 48, 54	4kVAC	▪	▪	91%	-20°C - +70°C	UL60601	

## AC-DC modules - OFF BOARD (HOUSING) - 320, 350 and 450 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification	PFC
320	320ACPE_C4	215.0 x 115.0 x 30.0mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 12; 15; 14; 48	4kVAC	▪	▪	87,5%	-30°C - +70°C	UL62368	
320	320ACPW_C4	215.0 x 115.0 x 30.0mm	wide	85-305VAC; 47-63Hz; 100-430VDC	4; 5; 12; 15; 24; 27; 48	4kVAC	▪	▪	87,5%	-30°C - +70°C	UL62368	
350	320ACPE_C4	127.0 x 76.2 x 25.4mm	wide	90-264VAC; 47-63Hz 127-373VDC	12; 15; 24; 27; 36; 48	4kVAC	▪	▪	94%	-40°C - +70°C	UL60601	
450	450ACPE_C4	215.0 x 115.0 x 30.0mm	wide	176-264VAC; 47-63Hz; 240-373VDC	12; 15; 24; 48	4kVAC	▪	▪	88%	-30°C - +70°C	UL62368	

## AC-DC modules - OFF BOARD (OPEN FRAME) - 3, 5, 10 and 15 watt

3	3ACFO_3	42 x 16 x 17mm	wide	85-264VAC; 47-63Hz 120-370VDC	3.3; 5; 9; 12; 15; 24	3kVAC	▪	▪	79%	-25°C - +70°C		
5	5ACFO_3	42 x 16 x 17mm	wide	165-264VAC; 47-63Hz; 230-370VDC	3.3; 5; 9; 12; 15; 24	3kVAC	▪	▪	79%	-25°C - +70°C		
10	10ACO_4	80 x 40 x 30mm	wide	30 - 280VAC; 30-400VDC	5, 12, 15	4kVAC	▪	▪	77%	-25°C ~ 70°C	UL62368	
10	10ACOW_3	60 x 42 x 16.3mm	wide	85-305VAC; 47-63Hz; 100-430VDC	3.3; 5; 9; 12; 15; 24	3kVAC	▪	▪	81%	-25°C - +70°C	UL62368	
15	15ACO_3	63.5 x 45.7 x 19.0mm	wide	85-264VAC; 47-63Hz; 120-370VDC	3.3; 5; 9; 12; 15	3kVAC	▪	▪	81%	-25°C - +70°C		
15	15ACOW_4	87.5 x 50.0 x 22.0mm	wide	85-305VAC; 47-63Hz 100-430VDC	3.3; 5; 12; 15; 24	4kVAC	▪	▪	85%	-25°C - +70°C		

## AC-DC modules - OFF BOARD (OPEN FRAME) - 3, 5, 10, 15, 30, 45, 65, 120 and 180 watt

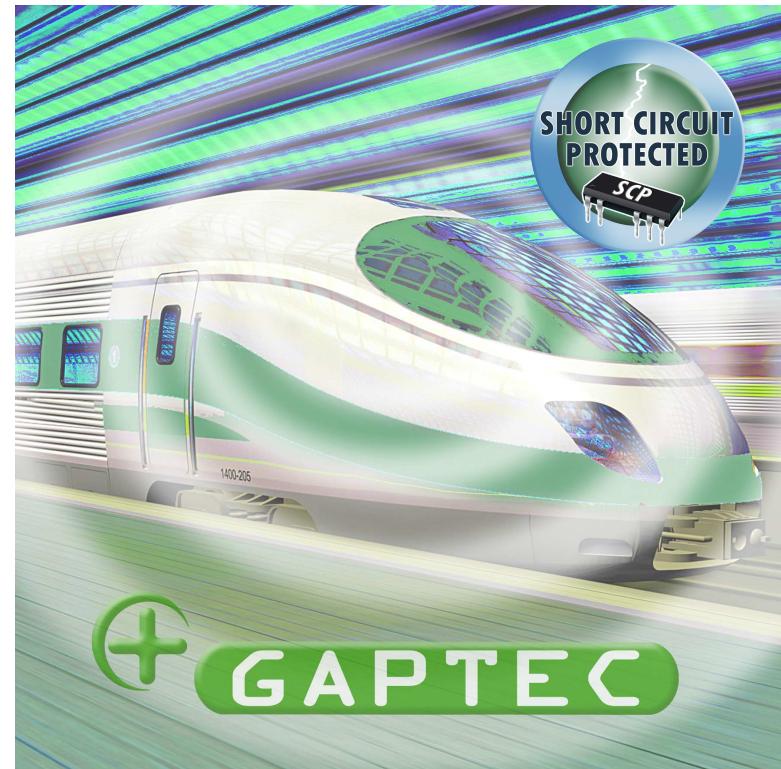
SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VAC/VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification	PFC
30	30ACO_3	76.2 x 44.45 x 27.0mm	wide	85-264VAC; 47-63Hz 120-370VDC	3.3; 5; 9; 12; 15; 24; 48	3kVAC	▪	▪	90%	-30°C - +70°C	UL62368	
45	45ACO_3	76.2 x 50.8 x 30.0mm	wide	85-264VAC; 47-63Hz 100-370VDC	3.3; 5; 9; 12; 15; 24; 48	3kVAC	▪	▪	87%	-25°C - +70°C	UL62368	
65	65ACMOP	76.2 x 50.8 x 28.7mm	wide	90-264VAC; 47-63Hz	5, 12, 15, 19, 20, 24, 28, 48, 56	4kVAC	▪	▪	87%	-20°C - +70°C	UL60601	
65	65ACO_3	76.2 x 44.8 x 30.0mm	wide	85-264VAC; 47-63Hz; 120-373VDC	5; 9; 12; 15; 24; 48	3kVAC	▪	▪	87%	-25°C - +70°C	UL62368	
120	120ACMOP_C4	76.2 x 50.8 x 3.0mm	wide	90-264VAC; 47-63Hz; 127-370VDC	12; 15; 19; 24; 27; 36; 48; 54	4kVAC	▪	▪	95%	-40°C - +85°C	UL62368	
180	180ACMOP	127 x 76.2 x 30 mm	wide	90-264VAC; 47-63Hz;	12, 15, 19, 24, 28, 48	4kVAC	▪	▪	87%	-0°C - +60°C	UL60601	
225	225ACMOP_C4	101 x 50.8 x 25.4mm	wide	85-264VAC; 47-63Hz; 120-370VDC	12; 15; 24; 27; 36; 48	4kVAC	▪	▪	94%	-40°C - +70°C	UL60601 UL62368	
280	280ACMOP	127 x 76.2 x 30mm	wide	85-305VAC; 47-63Hz 100-430VDC	12; 24; 28; 36; 48; 54	4kVAC	▪	▪	91%	-20°C - +70°C	UL60601	
360	360ACMOP	152.4 x 101.6 x 30mm	wide	90-264VAC; 47-63Hz;	12, 24, 28, 48, 54	4kVAC	▪	▪	90%	0°C - +70°C	UL60601	
450	450ACMOP_C4	127.0 x 76.2 x 38.5mm	wide	90-264VAC; 47-63Hz; 127-370VDC	12; 15; 24; 27; 36; 48	4kVAC	▪	▪	94%	-40°C - +70°C	UL60601 UL62368	
550	550ACMOP_C4	127.1 x 76.20 x 40.5mm	wide	90-264VAC; 47-63Hz; 240-373VDC	12, 15; 24, 27, 36, 48	4kVAC	▪	▪	94%	-40°C - +70°C	UL62368 UL60601	

# DC-DC converters for Railway Vehicle Applications

For higher than normal reliability requirements and for challenging environments. Developed for railway vehicle applications such as: Drivers cabin, propulsion, travellers cabin, electrical system and track side.

- Meets requirements of EN50155 standard
- High isolation voltage 2250VDC
- Meets requirements of IEC60950 standard
- Protection functions: OVP, OLP, UVP and SCP
- Wide input range 40 -160VDC
- Heatsink application optional



[www.gaptec-electronic.com/railway](http://www.gaptec-electronic.com/railway)

## DC-DC converters - galvanic isolated

Our DC-DC power supplies are trusted by OEMs and used in industry control, medical applications, telecom and communication, transportation and railway. Our power supplies meet the most important specifications in terms of output voltage ripple, low noise, high density, high efficiency (up to 93%), wide operating temperature range (up to -55°C/+125°C), input/output isolation and EMC. GAPTEC has a broad range of DC-DC converters, with output power ranges from 0.1 watt to 700 watts. Our products are available as THT (through hole technology) and SMT (service mount technology), in ultra small packages with high power density and isolation voltages up to 4.2kVAC/6kVDC & re-inforced up to 6kVDC.



Ultra wide input range DC-DC converters, isolated & regulated, single output, DIP & SMD package and ultra low case design.

## DC-DC converters - photovoltaic

Our DCP series DC-DC converters are generally used in the control and monitoring system for photovoltaic installations. Those converters are characterized by an extremely wide input voltage range of 200 - 1500VDC and in addition they are offering a high galvanic isolation (4kVDC). The operating temperature range is from -40°C to +85°C. Our DCP series offers the following power classes: 5, 10, 15 & 40 watts, along with the common industry standard output voltages. All converters are SCP (short circuit protected) to protect the converters and applications in the area of operation. The products are offered in compact size and in metal housings as through hole versions.



All parts are RoHS compliance and most with safety approvals (UL).

## DC-DC converters - INDUSTRIAL - 0.1 watt and 0.25 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
0.1	0.1S4A_1.5U	SIP4	±10%	3.3; 5; 12	3.3; 5; 9; 12; 15	1.5kVDC			86%	-40°C - +85°C	
0.1	0.1MS4A_1.5UP	SIP4 Micro	±10%	3.3; 5; 12	3.3; 5; 9; 12; 15	1.5kVDC			78%	-40°C - +105°C	
0.1	0.1MD4A_1.5U	DIP4 Micro	±10%	3.3; 5	3.3; 5	1.5kVDC			50%	-40°C - +85°C	
0.1	0.1D8A_1.5U	DIP8	±10%	3.3; 5; 12	3.3; 5; 9; 12; 15	1.5kVDC			86%	-40°C - +85°C	
0.1	0.1S7B_3UP	SIP7	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24; ±5 ±9; ±12; ±15	3kVDC	▪		80%	-40°C - +105°C	
0.1	0.1D14B_3UP	DIP14	±10%	3.3; 5; 12	3.3; 5; 9; 12; 15; 24; ±5 ±9; ±12; ±15	3kVDC	▪		80%	-40°C - +105°C	
0.25	QS7A_3UP	SIP7	±10%	3.3; 5; 12; 15	3.3; 5; 9; 12; 15; 24						
0.25	QS4E_1U	SIP4	±10%	3.3; 5; 7.2; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 24	1kVDC			74%	-40°C - +85°C	
0.25	QS4E_3U	SIP4	±10%	3.3; 5; 7.2; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 24	3kVDC			76%	-40°C - +85°C	
0.25	QS4A_1.5UP	SIP4	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12	1.5kVDC	▪		77%	-40°C - +105°C	UL60950
0.25	QD8E_1U	DIP8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 7.2; 9; 12; 15; 24	1kVDC			73%	-40°C - +85°C	
0.25	QD8E_3U	DIP8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 7.2; 9; 12; 15; 24	3kVDC			73%	-40°C - +85°C	
0.25	QT8E_1U	SMD8	±10%	3.3; 5; 12; 15	3.3; 5; 9; 12; 15	1kVDC			72%	-40°C - +85°C	
0.25	QT8A_1.5UP	SMD8	±10%	3.3; 5; 12; 24	3.3; 5; 9; 12; 15	1.5kVDC	▪		80%	-40°C - +105°C	
0.25	QS7B_3UP	SIP7	±10%	3.3; 5; 12; 15	±5 ±9; ±12; ±15; ±24	3kVDC	▪		81%	-40°C - +105°C	

## DC-DC converters - INDUSTRIAL - 0.25 watt, 0.5 watt and 0.75 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
0.25	QT8E_3UP	SMD8	±10%	5; 12	5	3kVDC		▪	77%	-40°C - +105°C	
0.25	QT8A_3UP	SMD8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15	3kVDC		▪	78%	-40°C - +105°C	
0.25	QT8B_3UP	SMD8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15	3kVDC		▪	78%	-40°C - +105°C	
0.5	0.5S4E_1U	SIP4	±10%	3.3; 5; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24	1kVDC			79%	-40°C - +85°C	
0.5	0.5D8E_1U	DIP8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 7.2; 9; 12; 15; 18; 24	1kVDC			77%	-40°C - +85°C	
0.5	0.5T8E_1U	DIP8	±10%	3.3; 5; 9; 12; 15	3.3; 5; 9; 12; 15	1kVDC			78%	-40°C - +85°C	
0.5	0.5S4E_3U	SIP4	±10%	3.3; 5; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24	3kVDC			83%	-40°C - +85°C	
0.5	0.5D8E_3U	DIP8	±10%	3.3; 5; 12; 15	3.3; 5; 7.2; 9; 12; 15; 18; 24	1kVDC			77%	-40°C - +85°C	
0.5	0.5S7B_3UP	SIP7	±10%	3.3; 5; 12; 15	3.3; 5; 9; 12; 15; 24; ±5 ±9; ±12; ±15	3kVDC		▪	83%	-40°C - +105°C	
0.5	0.5D14B_3UP	DIP14	±10%	3.3; 5; 12	3.3; 5; 9; 12; 15;	3kVDC		▪	80%	-40°C - +105°C	
0.5	0.5T8A_3UP	SMD8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15	3kVDC		▪	78%	-40°C - +105°C	
0.5	0.5T8CE_1UP	SMD8	±10%	24	15	1kVDC			77%	-40°C - +105°C	
0.75	0.75S4A_3RP	SIP4	±10%	5	3.3; 5; 9; 12; 15	3kVDC	▪	▪	74%	-40°C - +85°C	UL62368
0.75	0.75S7A_1U	SIP7	±10%	5; 12; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24; ±3.3; ±5; ±7.2; ±9; ±12; ±15; ±18; ±24	1kVDC			80%	-40°C - +85°C	
0.75	0.75T8A_1.5RP	SMD8	±10%	5	3.3; 5; 9; 12; 15	1.5kVDC	▪	▪	74%	-40°C - +85°C	UL62368



## DC-DC converters - INDUSTRIAL - 1 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1	1S4E_1U	SIP4	±10%	3.3; 5; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24	1kVDC			83%	-40°C - +85°C	
1	1S4A_1.5UP	SIP4	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	1.5kVDC			83%	-40°C - +105°C	UL60950
1	1MS4A_1U	SIP4 Micro	±10%	3.3; 5; 12	3; 5; 9; 12; 15	1kVDC			78%	-40°C - +85°C	
1	1MS4A_3UP	SIP4 Micro	±10%	3.3; 5; 12; 24	3; 5; 9; 12; 15	3kVDC			81%	-40°C - +85°C	
1	1D8E_1U	DIP8	±10%	3.3; 5; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24	1kVDC			83%	-40°C - +85°C	
1	1D8E_3U	DIP8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 7.2; 9; 12; 15; 18; 24	3kVDC			83%	-40°C - +85°C	
1	1S7AE_DS1U	SIP7	±10%	5; 12; 24	Vout1: 3.3; 5; 7.2; 9; 12; 15 Vout2: 3.3; 5; 7.2; 9; 12; 15	1kVDC			80%	-40°C - +85°C	
1	1D8A_1.5UP	DIP8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	1.5kVDC			83%	-40°C - +105°C	UL60950
1	1MD8A_3UP	DIP8 Micro	±10%	3.3; 5; 9; 12; 24	3.3; 5; 9; 12; 15	3kVDC			81%	-40°C - +85°C	
1	1D8W_1.5RP	DIP	2:1	9-18; 18-36	3.3; 5; 12; 15; 24	1.5kVDC			80%	-40°C - +85°C	UL62368
1	1D14A_DS3UP	DIP14	±10%	5; 12	Vout1: 5 Vout2: 3.3; 5; 9; 12; 15	3kVDC			80%	-40°C - +85°C	
1	1D14B_1.5UP	DIP14	±10%	5; 12; 24	±5; ±9; ±12; ±15; ±24	1.5kVDC			81%	-40°C - +105°C	UL60950
1	1D14C_3UP	DIP14	±10%	3.3; 5; 12; 15; 24	3.3; 5; 12; 15; ±5; ±12; ±15	3kVDC			81%	-40°C - +105°C	UL60950
1	1S7A_DS1U	SIP7	±10%	5; 9; 12; 15; 24	Vout1: 3.3; 5; 9; 12; 15; 24 Vout2: 3.3; 5; 9; 12; 15; 24	1kVDC			80%	-40°C - +85°C	
1	1S7A_DS3UP	SIP7	±10%	5; 9; 12; 15; 24	Vout1: 3.3; 5; 9; 12; 15; 24 Vout2: 3.3; 5; 9; 12; 15; 24	3kVDC			80%	-40°C - +85°C	

## DC-DC converters - INDUSTRIAL - 1 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1	1S7AE_1U	SIP7	±10%	3.3; 5; 12; 15; 24; 48	3.3; 5; 9; 12; 15; 18; 24; ±3.3; ±5; ±7.2; ±9; ±12; ±15; ±24	1kVDC	-	-	86%	-40°C - +85°C	
1	1S7E_1.5UP	SIP7	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24; ±3.3; ±5; ±12; ±15; ±24	1.5kVDC	-	-	80%	-40°C - +105°C	UL60950
1	1S7A_1.5UP	SIP7	±10%	5	5; 9; 12; 15; ±5; ±9; ±12; ±15	1.5kVDC	-	-	83%	-40°C - +105°C	UL62368
1	1S7B_3UP	SIP7	±10%	5	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	3kVDC	-	-	-	-40°C - +105°C	UL62368
1	1S7B_4UP	SIP7	±10%	3.3; 5; 9; 12; 15; 24	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	4kVDC	-	-	80%	-40°C - +105°C	
1	1S7B_6U	SIP7	±10%	5; 9; 12; 15; 24	5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	6kVDC	-	-	80%	-40°C - +85°C	
1	1S7B_6UP	SIP7	±10%	5; 12; 15; 24	3.3; 5; 12; 24; ±5; ±7.2; ±9; ±12; ±15	6kVDC	-	-	82%	-40°C - +105°C	UL60601
1	1S7A_1RP	SIP7	±10%	5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	1kVDC	-	-	75%	-40°C - +85°C	
1	1S7BE_3RP	SIP7	±10%	3.3; 5; 12; 24	3.3; 5; 7.2; 9; 12; 15	3kVDC	-	-	71%	-40°C - +85°C	
1	1S7WA_3RP	SIP7	2:1	4.5-9; 9-18; 18-36	5; 9; 12; 15; 24	3kVDC	-	-	83%	-40°C - +95°C	
1	1S7WB_3RP	SIP7	2:1	4.5-9; 9-18; 18-36	5; 9; 12; 15; 24	3kVDC	-	-	83%	-40°C - +95°C	
1	1S8W_1.5RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	5; 9; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	-	-	79%	-40°C - +85°C	UL60950
1	1S8W_3RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; ±5; ±12; ±15	3kVDC	-	-	81%	-40°C - +85°C	UL62368
1	1S8W_2RP	SIP8	2:1	4.5-9; 9-18; 18-36	3.3; 5; 9; 12; 15; ±3.3; ±5; ±12; ±15	2; 4; 5.2kVDC	-	-	81%	-40°C - +100°C	

# DC-DC converters - INDUSTRIAL - 1 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1	1S8W4_2RP	SIP8	4:1	4.5-18; 9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±3.3; ±5; ±12; ±15	2; 4kVDC	-	-	81%	-40°C - +100°C	
1	1T8E_1U	SMD8	±10%	3.3; 5; 9; 12; 15	3.3; 5; 9; 12; 15	1kVDC	-	-	80%	-40°C - +85°C	
1	1T8B_1U	SMD8	±10%	3.3; 5; 9; 12; 15	3.3; 5; 9; 12; 15	1kVDC	-	-	80%	-40°C - +85°C	
1	1T8A_1.5UP	SMD8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	1.5kVDC	-	-	81%	-40°C - +105°C	UL60950
1	1T8CE_1.5UP	SMD8	±10%	5	5	1.5kVDC	-	-	80%	-40°C - +105°C	
1	1T8A_3UP	SMD8	±10%	3.3; 5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	3kVDC	-	-	81%	-40°C - +105°C	UL60950
1	1T8A_3.5UP	SMD8	±10%	5	5	3.5kVDC	-	-	81%	-55°C - +125°C	
1	1T8F_4.2U	SMD8	±10%	3.3; 5	3.3; 5	4.2kVDC	-	-	75%	-40°C - +105°C	
1	1T8W_1.5RP	SMD	2:1	9-18; 18-36	3.3; 5; 12; 15; 24	1.5kVDC	-	-	80%	-40°C - +85°C	UL62368
1	1T10A_1.5UP	SMD10	±10%	3.3; 5; 12; 15; 24	±3.3; ±5; ±9; ±12; ±15; ±24	1.5kVDC	-	-	82%	-40°C - +105°C	UL60950
1	1T10A_3U	SMD10	±10%	3.3; 5; 9	3.3; 5; 9; ±3.3; ±5; ±9	3kVDC	-	-	75%	-40°C - +85°C	
1	1T10A_3UP	SMD10	±10%	3.3; 5; 12; 15; 24	±5; ±9; ±12; ±15; ±24	3kVDC	-	-	82%	-40°C - +105°C	UL60950
1	1T14A_1.5UP	SOIC-14	±10%	5	5	1.5kVDC	-	-	76%	-40°C - +105°C	
1	1TM14_3UP	SMD	±10%	5	5	3kVDC	-	-	85%	-40°C - +125°C	UL62368
1	1T14A_3RP	SOIC-14	±10%	5	5	3kVDC	-	-	72%	-40°C - +85°C	



# DC-DC converters - INDUSTRIAL - 1 watt, 1.5 watt and 2 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1	1T12CW_1.5RP	SMD12	2:1	9-18; 18-36; 36-72	5; 12; 15; 24	1.5kVDC	-	-	75%	-40°C - +85°C	
1	1T16WE_1.5RP	SMD16	2:1	4.5-9; 9-18; 18-36	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	-	-	80%	-40°C - +85°C	
1	1T12A_3U	SMD12	±10%	3.3; 5; 9; 12; 15	3.3; 5; 9; 12; 15; ±5; ±9; ±12; ±15	3kVDC			80%	-40°C - +85°C	UL60950
1.5	1.5D8A_1U	DIP8	±10%	5	5	1kVDC			70%	-40°C - +85°C	
2	2S4E_1U	SIP4	±10%	5; 12; 15; 24; 48	3.3; 5; 9; 12; 15; 24	1kVDC			88%	-40°C - +85°C	
2	2S4A_1.5UP	SIP4	±10%	5; 24	5	1.5kVDC	-	-	82%	-40°C - +85°C	
2	2S7A_1U	SIP7	±10%	5; 12; 15; 24; 48	3.3; 5; 7.2; 9; 12; 15; 24; ±3.3; ±5; ±7.2; ±12; ±15; ±18; ±24	1kVDC			82%	-40°C - +85°C	
2	2S7A_1.5UP	SIP7	±10%	5; 12; 15; 24	3.3; 5; 12; 15; 24; ±3.3; ±5; ±12; ±15; ±24	1.5kVDC	-	-	84%	-40°C - +105°C	UL60950
2	2S7A_1RP	SIP7	±10%	5; 12; 15; 24	5; 12; 15	1kVDC	-	-	72%	-40°C - +85°C	
2	2S7BE_3U	SIP7	±10%	3.3; 5; 12; 24; 48	3.3; 5; 9; 12; 15; 24; ±3.3; ±5; ±9; ±12; ±15; ±24	3kVDC				-40°C - +85°C	UL60950
2	2S7B_3UP	SIP7	±10%	5; 12; 15; 24	5; 12; 15; 24; ±5; ±12; ±15; ±24	3kVDC	-	-	80%	-40°C - +105°C	UL60950
2	2S7BE_6U	SIP7	±10%	3.3; 5; 12; 24; 48	3.3; 5; 9; 12; 15; 24; ±3.3; ±5; ±9; ±12; ±15; ±24	6kVDC				-40°C - +85°C	UL60950
2	2S7B_6UP	SIP7	±10%	5; 12; 24	5; 9; 12; 15; ±5; ±9; ±12; ±15	6kVDC	-	-	80%	-40°C - +95°C	UL60601
2	2S7W_1RP	SIP7	2:1	4.5-9; 9-18; 18-36; 36-72	3.3; 5; 9; 12; 15; ±3.3; ±5; ±9; ±12; ±15	1kVDC	-	-	84%	-40°C - +100°C	

## DC-DC converters - INDUSTRIAL - 2 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
2	2S7WA_3RP	SIP7	2:1	4.5-9; 9-18; 18-36	5; 9; 12; 15; 24	3kVDC	▪	▪	83%	-40°C - +95°C	
2	2S7WB_3RP	SIP7	2:1	4.5-9; 9-18; 18-36	5; 9; 12; 15; 24	3kVDC	▪	▪	83%	-40°C - +95°C	
2	2D14B_1U	DIP14	±10%	3.3; 5; 12; 24; 48	3.3; 5; 7.2; 9; 12; 15; 18; 24; ±3.3; ±5; ±7.2; ±9; ±12; ±15; ±18; ±24	1kVDC	▪	▪	82%	-40°C - +85°C	
2	2D14B_1.5UP	DIP14	±10%	3.3; 5; 9; 12; 15; 24	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	1.5kVDC	▪	▪	85%	-40°C - +95°C	UL60950
2	2D14C_3UP	DIP14	±10%	5; 12; 15	5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	3kVDC	▪	▪	85%	-40°C - +95°C	UL60950
2	2S8W_1RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-72	3.3; 5; 9; 12; 15; 24; ±3.3; ±5; ±9; ±12; ±15; ±24	1; 3kVDC	▪	▪	80%	-40°C - +85°C	UL60950
2	2S8W_2RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; ±3.3; ±5; ±12; ±15	2; 4kVDC	▪	▪	85%	-40°C - +100°C	
2	2S9W4_1.5RP	SIP9	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; ±5; ±9; ±12; ±15	1.5kVDC	▪	▪	79%	-40°C - +85°C	
2	2T8E_1U	SMD8	±10%	3.3; 5; 9; 12	3.3; 5; 9; 12	1kVDC	▪	▪	74%	-40°C - +85°C	
2	2T8A_1.5UP	SMD8	±10%	5; 12; 15; 24	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	82%	-40°C - +105°C	
2	2T8A_3UP	SMD8	±10%	5; 12; 15; 24	5; 9; 12; 15; 24	3kVDC	▪	▪	84%	-40°C - +105°C	
2	2TC12W4_3RP	SMD12	4:1	4.5-18; 9-36	5; 12; 15; ±12; ±15	3kVDC	▪	▪	75%	-40°C - +75°C	
2	2D16WA_1.5RP	DIP16	2:1	4.5-9; 9-18; 18-36	3.3; 5; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	80%	-40°C - +85°C	

## DC-DC converters - INDUSTRIAL - 2 watt and 3 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
2	2T16WE_1.5RP	DIP16	2:1	4,5-9; 9-18; 18-36	3.3; 5; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	80%	-40°C - +85°C	
2	2T16A_6UP	SMD16	±10%	5; 12; 24	3.3; 5; 9; 12; 15	6kVDC	▪	▪	80%	-40°C - +85°C	
3	3S4A_1U	SIP4	±10%	5; 12	5; 9; 12; 15 ±5; ±12; ±15	1kVDC	▪	▪	86%	-40°C - +85°C	
3	3S4A_1UP	SIP4	±10%	5; 12	5; 9; 12; 15; 18	1kVDC	▪	▪	86%	-40°C - +85°C	
3	3S7A_1U	SIP7	±10%	5; 12	5; 9; 12; 15; ±5; ±9; ±12; ±15	1kVDC	▪	▪	90%	-40°C - +85°C	
3	3S7A_1.5UP	SIP7	±10%	3.3; 5; 12; 24; 48	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	88%	-40°C - +105°C	
3	3S6W4_1.6RP	SIP6	4:1	4.5-18; 9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	84%	-40°C - +71°C	
3	3S7B_3U	SIP7	±10%	5; 12	5; 9; 12; 15; ±5; ±9; ±12; ±15	3kVDC	▪	▪	90%	-40°C - +85°C	
3	3S7B_3UP	SIP7	±10%	3.3; 5; 12; 24	3.3; 5; 9; 12; 15; ±5; ±9; ±12; ±15; ±24	3kVDC	▪	▪	87%	-40°C - +85°C	
3	3T8W_1.5RP	SMD	2:1	9-18; 18-36	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	80%	-40°C - +85°C	UL62368
3	3S8A_T1.5U	SIP8	±10%	4; 5; 12	-24; -48; -72	1.5kVDC	▪	▪	85%	-40°C - +105°C	
3	3S8W_1.5RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	5; 9; 12; 15; ±5; ±9; ±12; ±15	1.5kVDC	▪	▪	84%	-40°C - +85°C	
3	3S8EW_1.5RP	SIP8	2:1	9-18; 18-36; 36-72	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	80%	-40°C - +85°C	



## DC-DC converters - INDUSTRIAL - 3 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
3	3D8W_1.5RP	DIP	2:1	9-18; 18-36	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	80%	-40°C - +85°C	UL62368
3	3D8W4_1.6RP	DIP	4:1	4.5-18; 9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	84%	-40°C - +80°C	
3	3S8W_1.6RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	84%	-40°C - +85°C	UL60950
3	3S8W_3RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; ±5; ±9; ±12; ±15	3kVDC	▪	▪	83%	-40°C - +85°C	
3	3S8W_2RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; ±5; ±12; ±15	2; 4kVDC	▪	▪	86%	-40°C - +100°C	
3	3S8W4_2RP	SIP8	4:1	4.5-18; 9-36; 18-75	3.3; 5; 12; 15; ±3.3; ±5; ±12; ±15	2; 4kVDC	▪	▪	86%	-40°C - +100°C	
3	3S8W_4.3RP	SIP8	2:1	7-18	15	4.3kVDC	▪	▪	83%	-40°C - +105°C	
3	3T14W4_1.5RP	SMD14	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	83%	-40°C - +85°C	UL62368
3	3T16WE_1.5RP	SMD16	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	82%	-40°C - +85°C	
3	3DAW_1.5	DIP24	2:1	4.5-9; 9-18; 18-36; 36-72	5; 9; 12; 15; 24; ±9; ±12; ±15; ±24	1.5kVDC	▪	▪	81%	-40°C - +85°C	UL60950
3	3TAW_1.5	SMD24	2:1	9-18; 18-36; 36-75	5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	85%	-40°C - +85°C	
3	3DAW_3	DIP24	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; 24; ±9; ±12; ±15	3kVDC	▪	▪	86%	-40°C - +85°C	UL60950
3	3DAW_2	DIP24	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; ±3.3; ±5; ±12; ±15	2; 4; 6kVDC	▪	▪	85%	-40°C - +100°C	
3	3DAW4_1.5	DIP24	4:1	9-36; 18-72	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	83%	-40°C - +85°C	
3	3DAW4_2	DIP24	4:1	4.5-18; 9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	2; 4; 6kVDC	▪	▪	86%	-40°C - +100°C	

## DC-DC converters - INDUSTRIAL - 5 watt and 6 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	max.	Operating Temp.	Certification
5	5S8W_2RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	2; 4kVDC	▪	▪	85%	-40°C - +100°C	
5	5S8W4_2RP	SIP8	4:1	9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	2; 4kVDC	▪	▪	85%	-40°C - +85°C	
5	5DAW_2	DIP24	2:1	4.5-9; 9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	2; 4; 6kVDC	▪	▪	87%	-40°C - +100°C	
5	5DAW4_2	DIP24	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; ±5; ±9; ±12; ±15	2; 4; 6kVDC	▪	▪	85%	-40°C - +100°C	
5	5TAW_1.5	SMD24	2:1	9-18; 18-36; 36-72	5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	85%	-40°C - +85°C	
6	6S8W_1.6RP	SIP8	2:1	9-18; 18-36	3.3; 5; 9; 12; 15; 24	1.6kVDC	▪	▪	87%	-40°C - +85°C	
6	6S8W_3RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	5; 9; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +85°C	
6	6S8W4_1.5RP	SIP8	4:1	9-36; 18-72	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	88%	-40°C - +85°C	
6	6S8W4_1.6RP	SIP8	4:1	9-36	3.3; 5; 9; 12; 15; 24	1.6kVDC	▪	▪	88%	-40°C - +85°C	UL60950
6	6S8W4_3RP	SIP8	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	3kVDC	▪	▪	87%	-40°C - +85°C	
6	6DAW_1.5	DIP24	2:1	9-18; 18-36; 36-72	5; 9; 12; 15; 24; ±9; ±12; ±15; ±24	1.5kVDC	▪	▪	87%	-40°C - +85°C	
6	6D6AW_1.5	DIP	2:1	9-18; 18-36	3.3; 5; 12; 15	1.5kVDC	▪	▪	86%	-40°C - +85°C	
6	6T6AW_1.5	SMD	2:1	9-18; 18-36	3.3; 5; 12; 15	1.5kVDC	▪	▪	86%	-40°C - +85°C	
6	6DAW4_1.5	DIP24	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950
6	6DMW_1.5	1"x1"	2:1	9-18; 18-36	5; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	87%	-40°C - +85°C	UL60950
6	6DMW4_1.5	1"x1"	4:1	9-36; 18-75	5; 9; 12; 15; 24; ±5; ±12; ±15; ±24	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950



## DC-DC converters - INDUSTRIAL - 6 watt, 7.5 watt, 8 watt, 9 watt and 10 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
6	6DMRW4_2.25	1"x1"	4:1	40-160	5; 12; 15; 24	2.25kVDC	-	-	86%	-40°C - +85°C	
6	6DAW4_3	DIP24	4:1	9-36; 18-72	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	3kVDC	-	-	88%	-40°C - +85°C	UL60950
6	6DAMW4_6	DIP24	4:1	9-36; 18-72	5; 9; 12; 15; 24;	6kVDC	-	-	85%	-40°C - +85°C	
7.5	7.5DAW_2	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	2; 3kVDC	-	-	87%	-40°C - +100°C	
8	8DPW_1.6	DIP24	2:1	4.5-9; 9-18; 18-36; 36-72	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	-	-	86%	-40°C - +85°C	
8	8DPW4_1.6	DIP24	4:1	9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	-	-	86%	-40°C - +85°C	
8	8DPRW4_3	DIP24	4:1	13-70; 42-176	3.3; 5; 12; 15; ±5; ±12; ±15	3kVDC	-	-	86%	-40°C - +85°C	
9	9S8W_1.6RP	SIP8	2:1	9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	1.6kVDC	-	-	90%	-40°C - +85°C	UL62368
9	9S8W4E_1.6RP	SIP8	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	1.6kVDC	-	-	89%	-40°C - +100°C	
9	9S8W4_1.6RP	SIP8	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±5; ±12; ±15	1.6kVDC	-	-	89%	-40°C - +85°C	UL62368
10	10S8W_1.5RP	SIP8	2:1	9-18; 18-36	3.3; 5; 9; 12; 15; 24	1.5kVDC	-	-	88%	-40°C - +85°C	
10	10DPW_1.5	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	-	-	83%	-40°C - +85°C	
10	10DPW4_1.5	DIP24	4:1	9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	-	-	83%	-40°C - +85°C	
10	10DMW4_1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	1.5kVDC	-	-	88%	-40°C - +85°C	UL60950

# DC-DC converters - INDUSTRIAL - 10 watt, 12 watt 15 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
10	10DMW4_DS1.5	1"x1"	4:1	18-75	Vout1: 5 Vout2: 5; 12; 24	1.5kVDC	▪	▪	84%	-40°C - +85°C	
10	10D6AW4_1.5	DIP	4:1	9-36	5; 12; 15	1.5kVDC	▪	▪	88%	-40°C - +85°C	
10	10T6AW4_1.5	SMD	4:1	9-36	5; 12; 15	1.5kVDC	▪	▪	88%	-40°C - +85°C	
10	10DAW_1.5	2"x1"	2:1	9-18; 18-36; 36-72	3.3; 5; 12; 15; 24; ±5; ±12; ±15; ±24	1.5kVDC	▪	▪	88%	-40°C - +85°C	
10	10DAW4_1.5	2"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	87%	-40°C - +85°C	
10	10DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	85%	-40°C - +85°C	
10	10DAW4_3	2"x1"	4:1	9-36; 18-75	3.3; 9; 5; 12; 15; 24; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +85°C	UL60950
12	12DPW_1.5	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	83%	-40°C - +85°C	
12	12DPW4_1.5	DIP24	4:1	9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	83%	-40°C - +85°C	
15	15DPW_1.6	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	90%	-40°C - +85°C	
15	15DPW4_1.6	DIP24	4:1	9-36; 18-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	90%	-40°C - +85°C	
15	15DMWE_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +105°C	
15	15DMW_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	89%	-40°C - +85°C	
15	15DMOW4_1.5	1"x1"	4:1	18-75	3.3; 12	1.5kVDC	▪	▪	88.5%	-40°C - +85°C	
15	15DMWE4_S1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +105°C	UL62368
15	15DMWE4_D1.5	1"x1"	4:1	9-36; 18-75	±5; ±12; ±15; ±24	1.5kVDC	▪	▪	90%	-40°C - +105°C	
15	15DMW4_1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	88%	-40°C - +85°C	
15	15DAWE_1.5	2"x1"	2:1	18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	90%	-40°C - +85°C	UL60950
15	15DAW4_1.5	2"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; 24; ±5; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
15	15DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	86%	-40°C - +85°C	UL62368

## DC-DC converters - INDUSTRIAL - 20 and 25 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
20	20DMW_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
20	20DMWE_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +105°C	
20	20DMW4_1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
20	20DMWE4_1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15	1.5kVDC	▪	▪	91%	-40°C - +105°C	UL62368
20	20DAWE_1.5	2"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; 24; 110; ±5; ±9; ±12; ±15; ±24	1.5kVDC	▪	▪	90%	-40°C - +85°C	UL60950
20	20DAW4_1.5	2"x1"	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	UL60950
20	20DAW4_3	2"x1"	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24	3kVDC	▪	▪	89%	-40°C - +85°C	UL60950
20	20DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	86%	-40°C - +85°C	
20	20DBW8_1.5	2"x1,6"	8:1	6-50	5	1.5kVDC	▪	▪	90%	-40°C - +85°C	
25	25DMOW_1.5	15.24 x 19.1	2:1	36-75	5	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950
25	25TMOW_1.5	15.24 x 19.1	2:1	36-75	5	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950

LM078\_XX-3.0 SERIES: 3A. CTRL PIN. TRIM-PIN. UP TO 30 VIN DC.



# DC-DC converters - INDUSTRIAL - 30, 40, 50 and 60 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
30	30DAWE_1.5	2"x1"	2:1	18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	89%	-40°C - +85°C	UL60950
30	30DMWE4_1.5	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; 24; ±12; ±15; ±24	1.5kVDC	▪	▪	92%	-40°C - +80°C	
30	30DMW_1.6	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.6kVDC	▪	▪	88%	-40°C - +100°C	UL60950
30	30DMW4_1.5	1"x1"	4:1	18-75	5; 12; 15; 24	1.5kVDC	▪	▪	92%	-40°C - +85°C	UL62368
30	30DMW4_1.6	1"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.6kVDC	▪	▪	92%	-40°C - +75°C	UL60950
30	30DAW4_1.5	2"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL62368
30	30DBW4_1.5	2"x1.6"	4:1	9-36; 18-75	3.3; 5; 9; 12; 15; 24	1.5kVDC	▪	▪	89%	-40°C - +75°C	
30	30B16FW_1.5	1/16 Brick	2:1	36-75	3.3	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL60950
30	30TB16FW_1.5	1/16 Brick	2:1	36-75	3.3	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL60950
40	40DAWE_1.5	2"x1"	2:1	18-36; 36-75	12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL62368
40	40DAW_1.5	2"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	91%	-40°C - +85°C	
40	40DAW4_1.5	2"x1"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
40	40DDW_1.5	2"x2"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	91%	-40°C - +85°C	
40	40DDW4_1.5	2"x2"	4:1	9-36; 18-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
50	50DAW_1.5	2"x1"	2:1	18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	93%	-40°C - +85°C	
50	50QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
50	50QBTW12_2.25	Q-Brick	12:1	9-36; 9-75; 14-154	5; 12; 15; 24; ±12; ±15; ±24	3kVDC	▪	▪	90%	-40°C - +115°C	
60	60DAW_1.6	2"x1"	2:1	18-36; 36-72	3.3; 5; 12; 15	1.6kVDC	▪	▪	91%	-40°C - +85°C	
60	60DAW4_1.6	2"x1"	4:1	9-36; 18-75	5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	92.5%	-40°C - +85°C	UL60950
60	60DDW_1.5	2"x2"	2:1	18-36; 36-75	3.3; 5; 12; 15	1.5kVDC	▪	▪	90%	-40°C - +70°C	
60	60DDW_3	2"x2"	2:1	9-18; 18-36; 36-75	5; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +80°C	
60	60DDW4_3	2"x2"	4:1	9-36; 18-75	5; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +80°C	

# DC-DC converters - INDUSTRIAL - 75, 100, 150, 200, 450, 500 and 700 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
75	75QBW4_2.25	Q-Brick	4:1	18-75	5; 12; 15; 24; 48	2.25kVDC	▪	▪	93%	-40°C - +85°C	
75	75HBW4_1.5	H-Brick	4:1	9-36; 18-75	3.3; 5; 12; 15; 24; 48	1.5kVDC	▪	▪	85%	-40°C - +100°C	
75	75QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
100	100HBAW_1.5	H-Brick	2:1 ; 4:1	9-18; 18-36; 9-36; 18-72	3.3; 5; 12; 15; 24; 48	1.5kVDC	▪	▪	90%	-40°C - +85°C	
100	100QBW4_2.25	Q-Brick	4:1	18-75	5; 12; 15; 24; 48	2.25kVDC	▪	▪	94%	-40°C - +85°C	
100	100QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
150	150HB4_1.5	H-Brick	4:1	18-72	28; 48	1.5kVDC	▪	▪	80%	-25°C - +85°C	
150	150QBW4_2.25	Q-Brick	4:1	18-75	12; 24; 48	2.25kVDC	▪	▪	94%	-40°C - +85°C	
150	150HBRW4_3	H-Brick	4:1	50-160	12; 15; 24	3kVDC	▪	▪	91%	-40°C - +100°C	
200	200QBW4_2.25	Q-Brick	4:1	18-75	12; 24; 48	2.25kVDC	▪	▪	91%	-40°C - +85°C	
450	450HBAW_1.5	H-Brick	2:1	36-75	28; 48	1.5kVDC	▪	▪	94.5%	-40°C - +100°C	UL60950
500	500HBAW_1.5	H-Brick	2:1	36-75	50	1.5kVDC	▪	▪	93%	-40°C - +100°C	UL60950
700	700HBAW_1.5	H-Brick	2:1	36-75	28; 50	1.5kVDC	▪	▪	94%	-40°C - +100°C	UL60950

**NEW!**  
Highly efficient  
Miniature LED Drivers  
300mA up to 1,200mA  
Various Models



- Efficiency up to 96%
- Ripple & Noise (<100mV)
- Short Circuit Protected (SCP)
- PWM and Analogue Dimming
- Built-in EMI-Filter (EN55015)
- Remote ON/OFF-Function (IP67-Level)



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## DC-DC IGBT & SiC power modules

Our brand new regulated DC-DC power modules series - especially designed for driving IGBT and SiC drivers - can be widely used in frequency transformers, AC servo control systems, welding equipment and UPS (uninterruptible power supplies). Specially tailored to meet the IGBT & SiC driver technology standard, those power modules offer a wide range of protection features such as: output overvoltage protection and (SCP) continuous short circuit protection, that grant a safe operation. High isolation up to 6kVDC, isolated outputs and an operating temperature range from -40°C to +105°C meet all the safety requirements for SiC drivers. The power modules are designed according to EN60950 & IEC 60950 requirements.



## DC-DC LED drivers

Our constant current DC-DC LED drivers offer a very wide input voltage range to guarantee a constant light level throughout the life span of driving LED's. Possible applications can be found in the consumer & the industrial area. Selected types offer the option/ability to either use the analogue or the PWM dimming mode. The selected small case sizes (micro DIP, DIP24 or the SMD16 housing for SMT processing) allow currents of 300 -1200mA and meet the EN55015 Standard with the already built-in EMI filter. Continuous short circuit protection (SCP) and high efficiencies up to 97% ensure a long life and very high MTBF values.



DC-DC Power Modules Series - designed for driving IGBT and SiC drivers in frequency transformers, AC servo control systems, welding equipment and UPS.



High efficient DC-DC LED driver in miniature dimensions.

## DC-DC converters - PHOTOVOLTAIC - 5 watt, 10 watt, 15 watt and 40 watt

SCP = Short Circuit Protection

Power Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
5 5DCPE_4	DIP 70 x 48 mm	wide	100 - 1000	5	4kVDC	▪	▪	72%	-40°C - +70°C	
10 10DCPE_4	DIP 70 x 48 mm	wide	100 - 1000	5; 9; 24	4kVDC	▪	▪	80%	-40°C - +70°C	
10 10DCPW_4	DIP 111.76 x 75.0 mm	wide	200 - 1500	5	4kVDC	▪	▪	64%	-40°C - +70°C	
15 15DCPE_4	DIP 70.0 x 48.0 mm	wide	100 - 1000	12; 15; 24	4kVDC	▪	▪	80%	-40°C - +70°C	
15 15DCPW_4	DIP 111.76 x 75.0 mm	wide	200 - 1500	12; 15; 24	4kVDC	▪	▪	74%	-40°C - +70°C	
40 40DCP_4	DIP 89.0 x 63.5 mm	wide	200 - 1200	12; 15; 24	4kVDC	▪	▪	84%	-40°C - +70°C	
40 40DCPW_4	DIP 111.76 x 75.0 mm	wide	200 - 1500	12; 15; 24	4kVDC	▪	▪	80%	-40°C - +70°C	

## DC-DC converters - IGBT - 1.8 to 7.2 watt

1.8 1.8S7BT_D6	SIP7	+/-10%;	12; 15; 24	+15/-8.7; +9; +9/-9; +17; -8.7; +15/-8.7; +15/-8	3kVAC/6kVDC	▪	▪	80%	-40°C - +105°C	UL60950
2.0 2S7BT_D5.2P	SIP7	+/-10%	12; 15	+15/-8.7	5.2kVDC	▪	▪	80%	-40°C - +105°C	
3.6 3.6DABT_S12	2"x1"	+/-10%	15	24	12kVDC	▪	▪	80%	-40°C - +85°C	
4.8 4.8DBTSW_D3	DIP24	wide	7-18	+15/-9	3kVDC	▪	▪	83%	-40°C - +105°C	
4.8 4.8DBTW_D3	DIP24	wide	9-18; 18-36	+15/-9	3kVDC	▪	▪	85%	-40°C - +85°C	
4.8 4.8DBT_D4	DIP24	±10%	15	+15/-9	4kVAC	▪	▪	87%	-40°C - +85°	
7.2 7.2DBTW4_D4.2	DIP24	wide	9-36	24/24	4.2kVAC	▪	▪	85%	-40°C - +105°C	

## DC-DC converters - SiC - 2.4 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
2.0	2S7SiC_D5.2P	SIP7	±10%	12; 15; 24	+15/-3.0; +15/-5.0; +20/-3.0; +20/-5.0	5.2kVDC	▪	▪	80%	-40°C - +105°C	
2.4	2.4S7SiC_12153.5D6UP	SIP7	±10%	12	+15/-3.5	3.5kVAC / 6kVDC	▪	▪	81%	-40°C - +105°C	
2.4	2.4S7SiC_122004D6UP	SIP7	±10%	12	+20/-4	3.5kVAC / 6kVDC	▪	▪	80%	-40°C - +105°C	
2.4	2.4S7SiC_152004D6UP	SIP7	±10%	15	+20/-4	3.5kVAC / 6kVDC	▪	▪	83%	-40°C - +105°C	UL60950
2.4	2.4S7SiC_151505D6UP	SIP7	±10%	15	+15/-5	3.5kVAC / 6kVDC	▪	▪	80%	-40°C - +105°C	
2.4	2.4S7SiC_242004D6UP	SIP7	±10%	24	+20/-4	3.5kVAC / 6kVDC	▪	▪	80%	-40°C - +105°C	

## DC-DC converters - RAILWAY - 6, 8, 10, 15, 20, 50, 75, 100 and 150 watt

6	6DMRW4_2.25	1"x1"	4:1	40-160	5; 12; 15; 24	2.25kVDC	▪	▪	86%	-40°C - +85°C	
8	8DPRW4_3	DIP24	4:1	13-70; 42-176	3.3; 5; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	86%	-40°C - +85°C	
10	10DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	85%	-40°C - +85°C	
15	15DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	86%	-40°C - +85°C	
20	20DRW4_2.25	2"x1"	4:1	40-160	3.3; 5; 12; 15; 24	2.25kVDC	▪	▪	86%	-40°C - +85°C	
50	50QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
75	75QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
100	100QBR_3	Q-Brick	wide	66-160	24	3kVDC	▪	▪	92%	-40°C - +100°C	
150	150HBRW4_3	H-Brick	4:1	50-160	12; 15; 24	3kVDC	▪	▪	91%	-40°C - +100°C	

# DC-DC converters - TELECOM POWER - 5, 6, 7.5, 8, 10, 12, 15 and 20 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
5	5TAW_1.5	SMD24	2:1	9-18; 18-36; 36-72	5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	85%	-40°C - +85°C	
6	6S8W_3RP	SIP8	2:1	4.5-9; 9-18; 18-36; 36-75	5; 9; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +85°C	
6	6DAW_1.5	DIP24	2:1	9-18; 18-36; 36-72	5; 9; 12; 15; 24; ±9; ±12; ±15; ±24	1.5kVDC	▪	▪	87%	-40°C - +85°C	
7.5	7.5DAW_2	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; 24; ±5; ±9; ±12; ±15; ±24	2; 3kVDC	▪	▪	87%	-40°C - +100°C	
8	8DPW_1.6	DIP24	2:1	4.5-9; 9-18; 18-36; 36-72	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	86%	-40°C - +85°C	
10	10DAW_1.5	2"x1"	2:1	9-18; 18-36; 36-72	3.3; 5; 12; 15; 24; ±5; ±12; ±15; ±24	1.5kVDC	▪	▪	88%	-40°C - +85°C	
12	12DPW_1.5	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.5kVDC	▪	▪	83%	-40°C - +85°C	
15	15DPW_1.6	DIP24	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±5; ±12; ±15	1.6kVDC	▪	▪	90%	-40°C - +85°C	
15	15DMWE_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +105°C	
15	15DMW_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	89%	-40°C - +85°C	
15	15DAWE_1.5	2"x1"	2:1	18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	90%	-40°C - +85°C	UL60950
20	20DMW_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	90%	-40°C - +85°C	
20	20DMWE_1.5	1"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +105°C	
20	20DAWE_1.5	2"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 9; 12; 15; 24; 110;	1.5kVDC	▪	▪	90%	-40°C - +85°C	UL60950

# DC-DC converters - TELECOM POWER - 25, 30, 40, 50, 60, 450, 500 and 700 watt

SCP = Short Circuit Protection

Power	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
25	25DMOW_1.5	15.24 x 19.1	2:1	36-75	5	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950
25	25TMOW_1.5	15.24 x 19.1	2:1	36-75	5	1.5kVDC	▪	▪	88%	-40°C - +85°C	UL60950
30	30B16FW_1.5	1/16 Brick	2:1	36-75	3.3	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL60950
30	30TB16FW_1.5	1/16 Brick	2:1	36-75	3.3	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL60950
40	40DAWE_1.5	2"x1"	2:1	18-36; 36-75	12; 15; 24	1.5kVDC	▪	▪	91%	-40°C - +85°C	UL62368
40	40DAW_1.5	2"x1"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	91%	-40°C - +85°C	
40	40DDW_1.5	2"x2"	2:1	9-18; 18-36; 36-75	3.3; 5; 12; 15; ±12; ±15	1.5kVDC	▪	▪	91%	-40°C - +85°C	
50	50DAW_1.5R	2"x1"	2:1	18-36; 36-75	3.3; 5; 12; 15; 24	1.5kVDC	▪	▪	93%	-40°C - +85°C	
50	50DAW4_1.6	2"x1"	4:1	9-36; 18-75	5; 12; 15; 24	1.5kVDC	▪	▪	92%	-40°C - +85°C	
60	60DDW_1.5	2"x2"	2:1	18-36; 36-75	3.3; 5; 12; 15	1.5kVDC	▪	▪	90%	-40°C - +70°C	
60	60DDW_3	2"x2"	2:1	9-18; 18-36; 36-75	5; 12; 15; ±5; ±12; ±15	3kVDC	▪	▪	88%	-40°C - +80°C	
450	450HBAW_1.5	H-Brick	2:1	36-75	28; 48	1.5kVDC	▪	▪	94,5%	-40°C - +100°C	UL60950
500	500HBAW_1.5	H-Brick	2:1	36-75	50	1.5kVDC	▪	▪	93%	-40°C - +100°C	UL60950
700	700HBAW_1.5	H-Brick	2:1	36-75	28; 50	1.5kVDC	▪	▪	94%	-40°C - +100°C	UL60950

## DC-DC converters - non isolated - switching regulators point of load

Our DC-DC converters (POL) are trusted by OEMs and used in long-time stand-by battery, handheld equipment and portable devices. Those converters are designed as an alternative to replace triple-port linear regulators. Our point of load switching regulators meet the most important specifications in terms of output voltage ripple, low noise, high density, high efficiency (up to 96%), wide operating temperature range (up to -40 °C to + 85 °C). GAPTEC offers a broad range of DC-DC converters, with output current that ranges from 0.5 to 16 amperes. Products are available as board mount and chassis mount.



The LCW78\_1.0 series is a non-isolated POL switching regulator with an ultra-wide 14:1 high input voltage range (5-72VDC) with 1A output current that comes in a standard SIP3 package, covering most of the battery ranges and the standard power bus. This series offers high efficiency up to 96% and a very low quiescent current: 500uA.

Further features are a low ripple and noise (50 mVp-p) and short circuit protection (SCP). Ideally used for battery system applications, these high efficiency switching regulators are ideally suited to replace LM78xx linear regulators and are pin compatible.

## NEW: Feature series



### LMTM78-1.0 series

Ultra-small, ultra-thin DFN package  
(9.0 x 7.0 x 3.1mm)

Non isolated: YES

#### Output current: 1A

Short Circuit Protected (SCP): YES

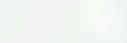
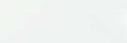
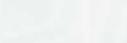
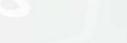
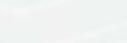
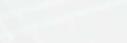
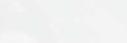
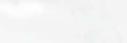
Meets AEC-Q100

High efficiency up to 94%



## DC-DC converters - STEP DOWN REGULATORS - 0.5A and 1.0A

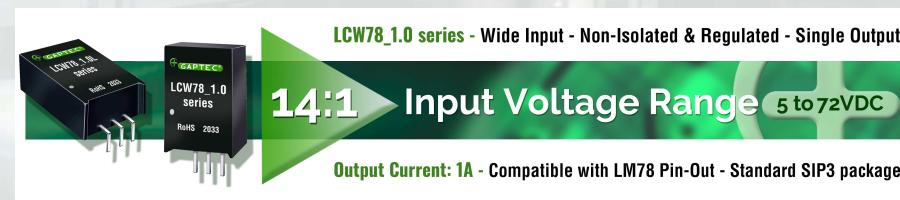
SCP = Short Circuit Protection

Power (A)	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
0.5	LC78_0.5	SIP3	wide	4.75-28	3.3; 5; 12	0.5	Non-isolated	▪	▪	95%	-40°C - +85°C	
0.5	LMT078_0.5	SMD open frame	wide	4.75-36	3.3; 5; 9; 12; 15	0.5	Non-isolated	▪	▪	93%	-40°C - +85°C	
0.5	LMTOE78_0.5	SMD open frame	wide	4.75-36	3.3; 5; 9; 12; 15	0.5	Non-isolated	▪	▪	93%	-40°C - +85°C	
0.5	LMTM78_0.5	SMD	wide	4.75-36	3.3; 5; 6.5; 9; 12; 15	0.5	Non-isolated	▪	▪	92%	-40°C - +100°C	
0.5	LMT78_0.5R	SMD	wide	4.75-36	1.5; 1.8; 2.5; 3.3; 5; 6.5; 9; 12; 15	0.5	Non-isolated	▪	▪	95%	-40°C - +85°C	
0.5	LMS78_0.5R	SIP3	wide	4.75 - 36	3.3; 5; 9; 12; 15	0.5	Non-isolated	▪	▪	96%	-40°C - +85°C	
0.5	LM078_0.5	SIP3 open frame	wide	4.75 - 36	3.3; 5; 12; 15	0.5	Non-isolated	▪	▪	93%	-40°C - +85°C	
0.5	LCN78_0.5	SIP3	wide	4.5-42	3.3; 5; 12	0.5	Non-isolated	▪	▪	96%	-40°C - +85°C	
0.5	LCP78_0.5	SIP3	wide	4.5-42	3.3; 5	0.5	Non-isolated	▪	▪	95%	-40°C - +85°C	
0.5	LCB78_0.5	SIP3	wide	4.5-55	3.3; 5	0.5	Non-isolated	▪	▪	95%	-40°C - +85°C	
0.5	LMW78_0.5R	SIP3	wide	9-90	3.3; 5; 6.5; 9; 12; 15; 24	0.5	Non-isolated	▪	▪	93%	-40°C - +85°C	
0.5	LCW78_0.5	SIP3	wide	9-75	3.3; 5; 6.5; 9; 12; 15	0.5	Non-isolated	▪	▪	89%	-40°C - +85°C	
0.5	LMTOW78_0.5	SMD open frame	wide	9-72	3.3; 5; 6.5; 7.2; 9; 12; 15	0.5	Non-isolated	▪	▪	84%	-40°C - +85°C	
1	LMT78_1.0R	SMD	wide	4.75-36	1.5; 1.8; 2.5; 3.3; 5; 6.5; 9; 12; 15	1.0	Non-isolated	▪	▪	95%	-40°C - +85°C	
1	LCE78_1.0	SIP3	wide	4.75-28	3.3; 5	1.0	Non-isolated	▪	▪	85%	-40°C - +75°C	
1	LME78_1.0	SIP3	wide	6-36	3.3; 5; 9; 12; 15	1.0	Non-isolated	▪	▪	96%	-40°C - +85°C	
1	LM078_1.0	SMD open frame	wide	6-36	3.3; 5; 12; 15	1.0	Non-isolated	▪	▪	94%	-40°C - +85°C	
1	LMT078_1.0	SMD open frame	wide	3-5.5; 4.6-36	1.2; 1.5; 1.8; 2.5; 3.3; 5; 6.5; 9; 12; 15	1.0	Non-isolated	▪	▪	94%	-40°C - +85°C	
1	LMS78_1.0R	SIP3	wide	6-36	3.3; 5; 9; 12; 15	1.0	Non-isolated	▪	▪	94%	-40°C - +85°C	
1	LC78_1.0	SIP3	wide	4.5-42	3.3; 5; 12	1.0	Non-isolated	▪	▪	93%	-40°C - +85°C	
1	LMP78_1.0	SIP3	wide	4.5-42	1.2; 1.5; 1.8; 2.5; 3.3; 5; 6.5; 9; 12; 15	1.0	Non-isolated	▪	▪	97%	-40°C - +85°C	
1	LCW78_1.0	SIP3	wide	5-72	3.3; 5; 9; 12; 24	1.0	Non-isolated	▪	▪	96%	-40°C - +100°C	
1	LMTM78-1.0	SMD Ultra thin DFN	wide	4.75-36	3.3; 5; 6.5; 9; 12; 15	1.0	Non-isolated	▪	▪	94%	-40°C - +105°C	

# DC-DC converters - STEP DOWN REGULATORS - 1.5, 2, 3, 6, 10 and 16A

SCP = Short Circuit Protection

Power (A)	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Isolation	Regulation	SCP	n max.	Operating Temp.	Certification
1.5	LMS78_1.5	SIP3	wide	4.75-18	1.5; 1.8; 2.5; 3.3; 5; 6.5	1.5	Non-isolated	▪	▪	95%	-40°C - +85°C	
1.5	LMP78_1.5	SIP3	wide	6-36	3.3; 5	1.5	Non-isolated	▪	▪	88%	-40°C - +85°C	
2	LMS78_2.0R	SIP3	wide	4.75-36	3.3; 5; 9; 12; 15	2.0	Non-isolated	▪	▪	93%	-40°C - +85°C	
2	LC78_2.0	SIP3	wide	4.5-30	1.8; 2.5; 3.3; 5; 12	2.0	Non-isolated	▪	▪	94%	-40°C - +85°C	
2	LCW78_2.0	SIP3	wide	4.5-36	1.8; 2.5; 3.3; 5	2.0	Non-isolated	▪	▪	90%	-40°C - +85°C	
2	LME78_2.0	SDIP3	wide	4.6-36	1.2; 1.5; 1.8; 2.5; 3.3; 5; 6.5; 9; 12; 15	2.0	Non-isolated	▪	▪	96%	-40°C - +85°C	
3	LC78_3.0	SIP3	wide	4.5-28	1.8; 2.5; 3.3; 5	3.0	Non-isolated	▪	▪	95%	-40°C - +85°C	
3	LM078_3.0	SIP5	wide	4.5-14; 10-30	0.59-6; 3-6; 5-15	3.0	Non-isolated	▪	▪	95%	-40°C - +85°C	
6	LOS_6	SIP	wide	2.4-5.5; 8.3-14	0.75-3.3; 0.75-5	6	Non-isolated	▪	▪	93%	-40°C - +85°C	
6	LOT_06R-X	SMD	wide	2.4-5.5; 8.3-14	0.75-3.3; 0.75-5	6	Non-isolated	▪	▪	93%	-40°C - +85°C	
10	LOT_10R-X	SMD	wide	8.3-14	0.75-5.0	10	Non-isolated	▪	▪	94%	-40°C - +85°C	
16	LOS_16	SIP	wide	8.3-14	0.75-5.0	16	Non-isolated	▪	▪	92%	-40°C - +85°C	
16	LOT_16	SMD	wide	8.3-14	0.75-5.0	16	Non-isolated	▪	▪	92%	-40°C - +85°C	



## DC-DC converters - LED DRIVERS - 0.3A - 1.2A

SCP = Short Circuit Protection

Power (A)	Series	Case Size	Input Range	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Isolation	Regulation	SCP	n max.	Operating Temp.	Dimming
0.3 - 0.7	LEDD10	DIP 22.8 x 10.2 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	95%	-40°C - +85°C	Analogue & PWM
0.3 - 0.7	LEDD10_A	DIP 22.8 x 10.2 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	95%	-40°C - +85°C	Analogue
0.3 - 0.7	LEDD10_P	DIP 22.8 x 10.2 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	95%	-40°C - +85°C	PWM
0.3 - 0.7	LEDW10	DIP 22.3 x 12.55 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	96%	-40°C - +85°C	Analogue & PWM
0.3 - 0.7	LEDW10_A	DIP 22.3 x 12.55 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	96%	-40°C - +85°C	Analogue
0.3 - 0.7	LEDW10_P	DIP 22.3 x 12.55 mm	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	96%	-40°C - +85°C	PWM
0.3 - 0.7	LEDT16	SMD16	wide	5.5 - 48	3.3 - 36	0.3 - 0.7	Non-isolated	▪	▪	96%	-40°C - +85°C	Analogue & PWM
0.5 - 1.0	LEDD16	DIP16	wide	7 - 30	2 - 28	0.5 - 1.0	Non-isolated	▪	▪	95%	-40°C - +85°C	Analogue & PWM
1.0 - 1.2	LEDD24	DIP24	wide	5.5 - 48	3.3 - 36	1.0 - 1.2	Non-isolated	▪	▪	97%	-40°C - +85°C	Analogue & PWM
1.0 - 1.2	LEDD24_A	DIP24	wide	5.5 - 48	3.3 - 36	1.0 - 1.2	Non-isolated	▪	▪	97%	-40°C - +85°C	Analogue
1.0 - 1.2	LEDD24_P	DIP24	wide	5.5 - 48	3.3 - 36	1.0 - 1.2	Non-isolated	▪	▪	97%	-40°C - +85°C	PWM

**NEW!**  
The New LM078-Series  
0,5A and 1A Versions



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- SIP3 case in open frame design
- Very low no-load power consumption
- The alternative to discrete solutions

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