

## Overview

# Switching power supplies and UPS

# Overview

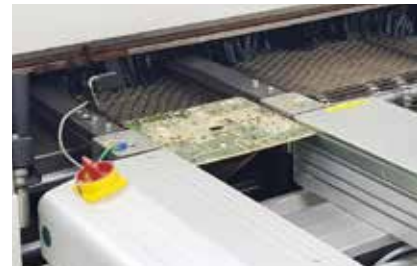
## Switching power supplies

OUTPUT																									
Series	up to 15.12 W					up to 26.4 W					up to 30 W					up to 36 W									
	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V					
SPDE																									
SPDC																									
SPDM																									
SPDE 2-ph																									
SPDE 3-ph																									
SPPC						▼	▼		▼							▼	▼		▼						
SPMA	▼	▼	▼	▼			▼				▼		▼						▼						
SPME		▼		▼			▼													▼					
Series	up to 100 W					120 W					up to 151.2 W					up to 201.6 W					240 W				
	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V
SPDE						▼		▼	▼						▼								▼	▼	
SPDC						▼		▼	▼														▼	▼	
SPDM						▼		▼	▼														▼	▼	
SPDE 2-ph								▼															▼	▼	
SPDE 3-ph																							▼	▼	
SPPC											▼	▼		▼	▼	▼	▼		▼		▼		▼	▼	
SPMA				▼																					
SPME				▼																					

### SPDE series – Ultra compact power supply

The new generation of Carlo Gavazzi power supplies encompasses high performance within an extremely compact footprint, saving up to 50% space compared to similar devices. The SPDE comes in single phase input model types. It is extremely suitable for applications where high efficiency and

wide operating temperatures are required. The SPDE series consists of 3 frame sizes, starting from 75 W with 32 mm width, to maximum 480 W with 48 mm width. The high quality of these power supplies is certified by a series of industry approvals: CE, UKCA, UL61010, UL62368.



### SPDM series – Medium compact power supply

This family of single phase input power supplies feature a reduced footprint, saving up to 30% space compared to similar devices. There are no frills, just standard features with high

performance and high reliability. The power rating ranges from 120 W to 240 W. The SPDM 120W comes with UL60950 and UL508.



### SPDC series – Advanced compact power supply

This compact family achieves high performance in compact dimensions. It is ideal for critical installations where space and reliability are of utmost importance. The SPDC power boost can provide 150% of the rated output power for up to 3 seconds, to support

the extra power needed during critical start-ups. The parallel feature provides redundancy in times of breakdown. The SPDC comes with UL60950 and UL508.



Series	Screw terminals	Parallel operation	Active current sharing	Power boost	Battery charger / UPS
SPDE	▼			▼	
SPDC	▼	▼		▼	
SPDM	▼				
SPDE 2-ph	▼			▼	
SPDE 3-ph	▼	Only 480 W	Only 480 W	▼	
SPPC	▼				
SPMA	▼				
SPME	▼				
SPUBC	▼	▼		▼	▼

# Switching power supplies

OUTPUT																				
Series	up to 54 W					60 W					up to 76.8 W					up to 91.92 W				
	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V
SPDE												▼		▼	▼					
SPDC																				
SPDM																				
SPDE 2-ph																				
SPDE 3-ph																				
SPPC	▼	▼	▼	▼	▼	▼							▼		▼	▼				
SPMA		▼						▼	▼								▼	▼	▼	
SPME		▼							▼								▼			
Series	up to 321.6 W					up to 528 W					up to 652.8 W					792 W				
	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V	5V	12V	15V	24V	48V
SPDE																				
SPDC																				
SPDM																				
SPDE 2-ph																				
SPDE 3-ph																				
SPPC		▼		▼	▼		▼		▼	▼		▼		▼	▼				▼	▼
SPMA																				
SPME																				



## SPMA series - Low-profile DIN rail power supplies for building automation and electric car battery chargers

The SPMA and SPME series are a very compact DIN rail power supplies designed for electrical panels with limited space. The SPMA and SPME series consist respectively of 3 and 4 frame sizes, starting from 1 DIN (17.5 mm) for the 15 W to a

maximum of 4 DIN (70 mm) for the 100 W model. The low-profile design of SPMA and SPME makes it ideal for applications such as building automation and electrical vehicle charging stations as it is designed with 4 kVAC isolation voltage.



## SPPC series – Enclosed type power supply

Enclosed metal casing power supplies are durable and economical, providing an excellent choice for customers, especially OEM machine makers, for any application. Power ratings range from 25 W to 800 W: in addition, the

SPPC comes with PFC from 100 W upwards. It comes with CE and UL approvals to cater to customers' requirements.



## Battery chargers and UPS

Carlo Gavazzi provides the ideal selection of special devices for any critical applications. The Battery Chargers and UPS optimise the backup battery performance through controlled charging/discharging, while our advanced SPUBC integrates

a power supply, battery charger and UPS into a single unit. The Redundancy Modules guarantee the continuity of the DC supply to applications with zero downtime, enabling a consistent output even when a source is faulty.

	cURus UL 60950-1	cURus UL 62368-1	cULus UL 508	cULus UL 61010	UL 1310 Class 2	UL ISA 12.12.01 Class I Div2	CE	UKCA
SPDE		Only 75 W		▼			▼	▼
SPDC	▼		▼				▼	
SPDM	Only 120 W		Only 120 W				▼	
SPDE 2-ph				▼			▼	▼
SPDE 3-ph				▼			▼	▼
SPPC	▼						▼	
SPMA		▼	▼		▼	▼	▼	▼
SPME		▼					▼	▼
SPUBC	▼		▼				▼	▼

# Overview

## Switching power supplies

### SPDE Series - Single phase - DIN rail mounting



Device	<b>SPDE 75W</b>	<b>SPDE 120W</b>	<b>SPDE 120W R</b>
Output power	75 W	120 W	120 W
Available output voltage DC	12 V - 24 V - 48 V	24 V	12 V - 24 V - 48 V
Input AC	90...264 V	90...264 V	90...264 V
Input DC	120...370 V	127...370 V	127...370 V
Approvals	CE - UKCA - cULus - cURus	CE - UKCA - cULus	CE - UKCA - cULus
Dimensions	87.5 x 32 x 129.80 mm (3.44" x 1.26" x 5.11")	100 x 36 x 129.80 mm (3.94" x 1.42" x 5.11")	110 x 32 x 128.82 mm (4.33" x 1.26" x 5.07")
Efficiency	90%	89%	89%
DC ok	NO	NO	YES

### SPDE Series - Single phase - DIN rail mounting



Device	<b>SPDE 190W</b>	<b>SPDE 240W R</b>	<b>SPDE 480W R</b>
Output power	190 W	240 W	480 W
Available output voltage DC	12 V	24 V - 48 V	24 V - 48 V
Input AC	85...264 V	85...264 V	85...264 V
Input DC	120...370 V	120...370 V	120...370 V
Approvals	CE - UKCA - cULus	CE - UKCA - cULus	CE - UKCA - cULus
Dimensions	110 x 41 x 128.82 mm (4.33" x 1.61" x 5.07")	110 x 41 x 128.82 mm (4.33" x 1.61" x 5.07")	131.5 x 48 x 130.60 mm (5.18" x 1.89" x 5.14")
Efficiency	92,00%	94,00%	94,00%
DC ok	YES	YES	YES

### SPDC Series - Single phase - DIN Rail mounting



Device	<b>SPDC 120W</b>	<b>SPDC 240W</b>	<b>SPDC 480W</b>
Output power	120 W	240 W	480 W
Available output voltage DC	12 V - 24 V	24 V	24 V - 48 V
Input AC	85...264 V	85...264 V	90...264 V
Input DC	127...375 V	127...375 V	130...350 V
Approvals	CE - cULus - cURus	CE - cULus - cURus	CE - cULus - cURus
Dimensions	124 x 119 x 32 mm (4.88" x 4.69" x 1.26")	124 x 119 x 45 mm (4.88" x 4.69" x 1.77")	124 x 127 x 70 mm (4.88" x 5.00" x 2.75")
Efficiency	91%	91%	93%
DC ok	YES	YES	YES

# Switching power supplies

## SPDM Series - Single phase - DIN rail mounting



Device	<b>SPDM 120W</b>	<b>SPDM 240W</b>
Output power	120 W	240 W
Available output voltage DC	12 V - 24 V - 48 V	24 V - 48 V
Input AC	90...264 V	90...264 V
Input DC	127...375 V	127...370 V
Approvals	CE - cULus - cURus	CE - cULus - cURus
Dimensions	124 x 119 x 45 mm (4.88" x 4.69" x 1.77")	124 x 127 x 70 mm (4.88" x 5.00" x 2.75")
Efficiency	88%	88%
DC ok	NO	NO

## SPDE Series - Bi phase - DIN rail mounting



Device	<b>SPDE 120W/2</b>	<b>SPDE 240W/2</b>
Output power	120 W	240 W
Available output voltage DC	24 V	24 V
Input AC	180...600 V	180...550 V
Input DC	254...848 V	254...780 V
Approvals	CE - UKCA - cULus	CE - UKCA - cULus
Dimensions	124 x 41 x 110 mm (4.88" x 1.61" x 4.33")	124 x 54 x 110 mm (4.88" x 2.13" x 4.33")
Efficiency	91%	91%
DC ok	YES	YES

## SPDE Series - Three phase - DIN rail mounting



Device	<b>SPDE 240W/3</b>	<b>SPDE 480W/3</b>
Output power	240 W	480 W
Available output voltage DC	24 V - 48 V	24 V - 48 V
Input AC	320...600 V	320...600 V
Input DC	450...850 V	450...800 V
Approvals	CE - UKCA - cULus	CE - UKCA - cULus
Dimensions	124 x 54 x 110 mm (4.88" x 2.13" x 4.33")	124 x 80 x 127 mm (4.88" x 3.15" x 5")
Efficiency	92%	95.6%
DC ok	YES	YES

# Switching power supplies

## SPPC Series - Single phase - Panel mounting



Device	<b>SPPC 25W</b>	<b>SPPC 35W</b>	<b>SPPC 50W</b>	<b>SPPC 75W</b>
Output power	25...26.4W	30...36 W	40...53.76 W	60...76.8 W
Available output voltage DC	5 V - 12 V - 24 V	5 V - 12 V - 24 V	5 V - 12 V - 15 V - 24 V - 48 V	5 V - 12 V - 24 V - 48 V
Input AC	90...264 V	90...264 V	90...264 V	90...264 V
Input DC	127...370 V	127...370 V	127...370 V	127...370 V
Approvals	CE - cURus	CE - cURus	CE - cURus	CE - cURus
Dimensions	79 x 51 x 28.8 mm (3.11" x 2" x 1.13")	101.6 x 63.5 x 33 mm (4" x 2.5" x 1.29")	99 x 82 x 35 mm (3.89" x 3.22" x 1.37")	129 x 98 x 39 mm (5.08" x 3.85" x 1.53")
Efficiency	85%	87%	89%	89%

## SPPC Series - Single phase - Panel mounting



Device	<b>SPPC 150W</b>	<b>SPPC 200W</b>	<b>SPPC 240W</b>
Output power	150...151.2 W	200...201.6 W	240 W
Available output voltage DC	12 V - 24 V	5 V - 12 V - 24 V - 48 V	12 V - 24 V
Input AC	86...264 V	85...264 V	85...264 V
Input DC	120...370 V	120...370 V	120...370 V
Approvals	CE - cURus	CE - cURus	CE - cURus
Dimensions	160 x 98 x 38 mm (6.29" x 3.85" x 1.49")	199 x 99 x 50 mm (7.83" x 3.89" x 1.96")	199 x 99 x 50 mm (7.83" x 3.89" x 1.96")
Efficiency	87%	87%	86%
Features	Compact, PFC	Compact, PFC	Compact, PFC

## SPPC Series - Single phase - Panel mounting



Device	<b>SPPC 320W</b>	<b>SPPC 480W</b>	<b>SPPC 600W</b>	<b>SPPC 800W</b>
Output power	275...321.6 W	408...528 W	504...652.8 W	792 W
Available output voltage DC	5 V - 12 V - 24 V - 48 V	12V - 24V - 36V - 48V	12 V - 24 V - 36 V - 48 V	24 V - 48 V
Input AC	85...264 V	90...264 V	90...264 V	90...264 V
Input DC	120...370 V	127...370 V	127...370 V	127...370 V
Approvals	CE - cURus	CE - cURus	CE - cURus	CE - cURus
Dimensions	199 x 99 x 50 mm (7.83" x 3.89" x 1.96")	226 x 116.5 x 41 mm (8.89" x 4.58" x 1.61")	226 x 116.5 x 41 mm (8.89" x 4.58" x 1.61")	226 x 116.5 x 41 mm (8.89" x 4.58" x 1.61")
Efficiency	87%	90%	90%	90%
Features	Compact, PFC	Compact, PFC	Compact, PFC	Compact, PFC

# Switching power supplies

## SPMA Series - Single phase - DIN rail mounting



Device	SPMA 15	SPMA 30	SPMA 60	SPMA 100
Output power	12...15 W	25...36 W	54...60 W	85...100 W
Available output voltage DC	5 V - 12 V - 15 V - 24 V	5 V - 12 V - 15 V - 24 V	12 V - 15 V - 24 V	12 V - 15 V - 24 V
Input AC	85...264 V	85...264 V	85...264 V	85...264 V
Input DC	120...350 V	120...350 V	120...350 V	120...350 V
Approvals	CE - UKCA - cULus - cURus - UL1310 Class 2 - UL ISA 12.12.01 Class I Div2	CE - UKCA - cULus - cURus - UL1310 Class 2 - UL ISA 12.12.01 Class I Div2	CE - UKCA - cULus - cURus - UL1310 Class 2 - UL ISA 12.12.01 Class I Div2	CE - UKCA - cULus - cURus - UL1310 Class 2 - UL ISA 12.12.01 Class I Div2
Dimensions	91 x 18 x 63 mm (3.58" x 0.71" x 2.48")	91 x 52.5 x 63 mm (3.58" x 2.07" x 2.48")	91 x 52.5 x 63 mm (3.58" x 2.07" x 2.48")	91 x 70 x 63 mm (3.58" x 2.76" x 2.48")
Efficiency	85%	88%	89%	89%
DC ok (LED indication)	YES	YES	YES	YES
Options	Conformal coating [SCC]	Conformal coating [SCC]	Conformal coating [SCC]	Conformal coating [SCC]

## SPME Series - Single phase - DIN rail mounting



Device	SPME 15	SPME 24 - 36	SPME 54 - 60	SPME 90 - 100
Output power	15 W	24...36 W	54...60 W	90...100 W
Available output voltage DC	12 V - 24 V	12 V - 24 V	12 V - 24 V	12 V - 24 V
Input AC	85...264 V	85...264 V	85...264 V	85...264 V
Input DC	120...370 V	120...370 V	120...370 V	120...370 V
Approvals	CE - UKCA - cURus	CE - UKCA - cURus	CE - UKCA - cURus	CE - UKCA - cURus
Dimensions	90 x 17.5 x 63 mm (3.54" x 0.69" x 2.48")	90 x 35 x 63 mm (3.54" x 1.38" x 2.48")	90 x 52 x 63 mm (3.54" x 2.05" x 2.48")	90 x 70 x 63 mm (3.54" x 2.76" x 2.48")
Efficiency	86%	88%	90%	90%
DC ok (LED indication)	YES	YES	YES	YES
Mounting	DIN rail	DIN rail	DIN rail	DIN rail

## Battery chargers & UPS

## DIN rail battery bank



Device	SPUBC UPS battery charger	SPUBAT24
Output current	120 W	1.2 A - 3.2 A - 7.2 A - 12 A
Available output voltage DC	12 V - 24 V	DC 24 V
Input AC	115...277 V	
Input DC		24 V
Approvals	CE - UKCA - cURus	CE
Dimensions	65 x 115 x 135 mm (2.56" x 4.53" x 5.31")	SPUBAT241A2: 176 x 67 x 122 mm (6.93" x 2.64" x 4.80") SPUBAT243A2: 193 x 75 x 163 mm (7.59" x 2.95" x 6.42") SPUBAT247A2: 203 x 139 x 129 mm (7.99" x 5.47" x 5.08") SPUBAT2412A: 201 x 114 x 205 mm (7.91" x 4.49" x 8.07")
Mounting	DIN rail	DIN rail



## OUR SALES NETWORK IN EUROPE

### AUSTRIA

Carlo Gavazzi GmbH  
Ketzergasse 374,  
A-1230 Wien  
Tel. +43 1 888 4112  
Fax +43 1 889 1053  
office@carlogavazzi.at

### FINLAND

Carlo Gavazzi OY AB  
Sinimäentie 8B  
FI-02170 Espoo  
Tel. +358 9 756 2000  
myynti@gavazzi.fi

### GREAT BRITAIN

Carlo Gavazzi UK Ltd  
4.4 Frimley Business Park,  
Frimley, Camberley,  
Surrey GU16 7SG  
Tel. +44 1 276 854110  
Fax +44 1 276 682140  
sales@carlogavazzi.co.uk

### NORWAY

Carlo Gavazzi AS  
Melkeveien 13,  
N-3919 Porsgrunn  
Tel. +47 35 93 08 00  
Fax +47 35 93 08 01  
post@gavazzi.no

### SWEDEN

Carlo Gavazzi AB  
V:a Kyrkogatan 1,  
S-652 24 Karlstad  
Tel. +46 54 85 11 25  
Fax +46 54 85 11 77  
info@carlogavazzi.se

### BELGIUM

Carlo Gavazzi NV/SA  
Mechelsesteenweg 311,  
B-1800 Vilvoorde  
Tel. +32 2 257 41 20  
sales@carlogavazzi.be

### FRANCE

Carlo Gavazzi Sarl  
Zac de Paris Nord II, 69,  
rue de la Belle Etoile,  
F-95956 Roissy CDG Cedex  
Tel. +33 1 49 38 98 60  
Fax +33 1 48 63 27 43  
french.team@carlogavazzi.fr

### ITALY

Carlo Gavazzi SpA  
Via Milano 13,  
I-20045 Lainate (MI)  
Tel. +39 02 931 76 1  
info@gavazziacbu.it

### PORTUGAL

Carlo Gavazzi Lda  
Rua dos Jerónimos 38-B,  
P-1400-212 Lisboa  
Tel. +351 21 361 70 60  
Fax +351 21 362 13 73  
carlogavazzi@carlogavazzi.pt

### SWITZERLAND

Carlo Gavazzi AG  
Verkauf Schweiz/Vente Suisse  
Sumpfstrasse 3,  
CH-6312 Steinhausen  
Tel. +41 41 747 45 35  
Fax +41 41 740 45 40  
info@carlogavazzi.ch

### DENMARK

Carlo Gavazzi Handel A/S  
Over Hadstenvej 40,  
DK-8370 Hadsten  
Tel. +45 89 60 61 00  
Fax +45 86 98 15 30  
handel@gavazzi.dk

### GERMANY

Carlo Gavazzi GmbH  
Pfnorstr. 10-14  
D-64293 Darmstadt  
Tel. +49 6151 81 00 0  
Fax +49 6151 81 00 40  
info@gavazzi.de

### NETHERLANDS

Carlo Gavazzi BV  
Wijkmeerweg 23,  
NL-1948 NT Beverwijk  
Tel. +31 251 22 93 45  
info@carlogavazzi.nl

### SPAIN

Carlo Gavazzi SA  
Avda. Iparraguirre, 80-82,  
E-48940 Leioa (Bizkaia)  
Tel. +34 94 480 40 37  
Fax +34 94 431 60 81  
gavazzi@gavazzi.es

## OUR SALES NETWORK IN THE AMERICAS

### USA

Carlo Gavazzi Inc.  
750 Hastings Lane,  
Buffalo Grove, IL 60089-6904,  
USA  
Tel. +1 847 465 61 00  
sales@carlogavazzi.com

### CANADA

Carlo Gavazzi Inc.  
2660 Meadowvale Boulevard,  
Mississauga, ON L5N 6M6,  
Canada  
Tel. +1 905 542 0979  
Fax +1 905 542 2248  
gavazzi@carlogavazzi.com

### MEXICO

Carlo Gavazzi Mexico S.A. de C.V.  
Circuito Puericultores 22,  
Ciudad Satelite  
Naucalpan de Juárez,  
Edo Mex. CP 53100 - Mexico  
Tel. +52 55 5373 7042  
Fax +52 55 5373 7042  
mexicosales@carlogavazzi.com

### BRAZIL

Carlo Gavazzi Automação Ltda.  
Av. Francisco Matarazzo,  
1752 Conjunto 2108  
CEP 05001-200 -  
São Paulo - SP - Brazil  
Tel. +55 11 3052 0832  
Fax +55 11 3057 1753  
info@carlogavazzi.com.br

## OUR SALES NETWORK IN ASIA AND PACIFIC

### SINGAPORE

Carlo Gavazzi Automation  
Singapore Pte. Ltd.  
61 Tai Seng Avenue #05-06  
Print Media Hub  
@ Paya Lebar iPark  
Singapore 534167  
Tel. +65 67 466 990  
Fax +65 67 461 980  
info@carlogavazzi.com.sg

### TAIWAN

Branch of Carlo Gavazzi Automation  
Singapore Pte. Ltd.  
12F-3, No. 530, Yingcai Rd.,  
West Dist., Taichung City  
403518,  
Taiwan, China  
Tel. +886 4 2258 4001  
Fax +886 4 2258 4002

### MALAYSIA

Carlo Gavazzi Automation (M)  
SDN. BHD.  
D12-06-G, Block D12,  
Pusat Perdagangan Dana 1,  
Jalan PUJ 1A/46,  
47301 - Petaling Jaya,  
Selangor, Malaysia  
Tel. +60 3 7842 7299  
Fax +60 3 7842 7399  
info@gavazzi-asia.com

### CHINA

Carlo Gavazzi Automation  
(China) Co. Ltd.  
Unit 2308, 23/F.,  
News Building, Block 1, 1002  
Middle Shennan Zhong Road,  
Futian District,  
Shenzhen, China  
Tel. +86 755 8369 9500  
Fax +86 755 8369 9300  
sales@carlogavazzi.cn

### HONG KONG

Carlo Gavazzi Automation  
Hong Kong Ltd.  
Unit No. 16 on 25<sup>th</sup> Floor,  
One Midtown,  
No. 11 Hoi Shing Road, Tsuen Wan,  
New Territories, Hong Kong  
Tel. +852 26261332  
Fax +852 26261316

## OUR COMPETENCE CENTRES AND PRODUCTION SITES

### DENMARK

Carlo Gavazzi Industri A/S  
Hadsten

### MALTA

Carlo Gavazzi Ltd  
Zejtun

### ITALY

Carlo Gavazzi Controls SpA  
Belluno

### LITHUANIA

Uab Carlo Gavazzi Industri Kaunas  
Kaunas

### CHINA

Carlo Gavazzi Automation  
(Kunshan) Co., Ltd.  
Kunshan

## HEADQUARTERS

### CARLO GAVAZZI AUTOMATION SPA

Via Milano, 13  
I-20045 - Lainate (MI) - ITALY  
Tel. +39 02 931 761  
info@gavazziautomation.com

*Energy to Components!*

www.gavazziautomation.com