



**SPA / DPA / SPB / DPB Series:
1W~9W SIP 8:1 Ultra-Wide Input Isolated Regulated DC-DC Converters**

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The single output DC-DC module series SPA01/SPAN02/SPBW03/SPBW06/SPB09 and dual output series DPAN02/DPBW03/DPBW06/DPB09, with SIP (Single Inline Package) pin layout and power ratings from 1W to 9W, featuring 2:1 and 4:1 input voltage range, have been on the market for years. With annual sales in hundreds of thousands of units, these modules are widely used in power systems, electronic instrumentation, communication equipment, industrial automation control, IoT, and more.

Now, a new generation of ultra-wide input voltage modules has been launched, including the single output SPA01W8/SPAN02W8/SPBW03W8/SPBW06W8/SPB09W8 and dual output DPA01W8/DPAN02W8/DPBW03W8/DPBW06W8/DPB09W8 series. These five new product lines stand out with their ultra-wide 8:1 input voltage range (9~75Vdc), which not only meets broader voltage requirements but also simplifies model selection by standardizing all models to a 9~75Vdc input range, making the selection process significantly easier.

The new 5-series modules are pin-to-pin compatible with the previous generation, enabling painless drop-in replacement for end-system designers.



For a comparison of the key features and specifications between the new and previous generations, please refer to the table below:

Series		New Generation					Old Generation							
	1 Vo	SPA01W8	SPAN02W8	SPBW03W8	SPBW06W8	SPB09W8	SPA01	SPAN02	SPBW03	SPBW06	SPB09			
	2 Vo	DPA01W8	DPAN02W8	DPBW03W8	DPBW06W8	DPB09W8	N.A	DPAN02	DPBW03	DPBW06	DPB09			
Wattage		1W	2W	3W	6W	9W	1W	2W	3W	6W	9W			
Input Voltage (Vdc)		8:1 12V、24V、48V (9~75V)					2:1 5V (4.5~9V, SPAN02 / DPAN02 only) 12V (9~18V) 24V (18~36V) 48V (36~75V)		4:1 12V、24V (9~36V) 24V、48V (18~75V)		2:1 12V (9~18V) 24V (18~36V) 48V (36~75V)			
Output Voltage (Vdc)	1 Vo	3.3V、5V、9V、12V、15V、24V (9V/24V, 1W / 9W only)					5V、12V、15V	3.3V、5V、12V、15V (24V, 9W only)						
	2 Vo	±5V、±12V、±15V					N.A	±5V、±12V、±15V						
Operating Temp.		-40~+95°C		-40~+90°C	-40~+85°C	-40~+90°C	-40~+90°C		-40~+85°C	-40~+90°C				
Input/Output Isolation		1.5KVdc	3KVdc			1.5KVdc	1.5KVdc							
Protections		Short Circuit, Overload, Input Undervoltage					Short Circuit, Overload							
Dimension (L x W x H)		17.4*7.7*11.1 mm	21.8*9.2*11.1 mm			24*9.6*11.2 mm	17.4*7.7*11.1 mm	21.8*9.2*11.1 mm			24*9.6*11.2 mm			
Safety Certification		EAC、CE、UKCA					EAC、CE、UKCA							
Warranty		3 Years					2 Years	3 Years						

FEATURES

- SIP single-row pin package with industry-standard pinout
- 8:1 ultra-wide input range (9~75Vdc)
- Free air convection; operable from -40 to +95°C (varies by model)
- Meets EMI EN55032 Class A without external components (for selected models)
- Stable operation without minimum load
- Protections: short circuit, overload, over voltage, and under voltage
- Certifications: EAC / CE / UKCA
- 3 years warranty

APPLICATION

Automated Testing Equipment (ATE)



ORDER INFORMATION

S PA
S PB
S PAN
S PBW 01 W8 - 12

Output voltage { 1W/ 9W models: 3.3/ 5/ 9/ 12/ 15/ 24Vdc : ±5/ ±12/ ±15Vdc
2W/ 3W/ 6W models: 3.3/ 5/ 12/ 15Vdc : ±5/ ±12/ ±15Vdc

8:1(9~75Vdc) wide input voltage

Rated wattage (01: 1W, 02: 2W, 03: 3W, 06: 6W, 09: 9W)

Series name { S : Single output
D : Dual output