

Switching Power Supply Redundant Module Type SPM2RM2410 DIN rail mounting

CARLO GAVAZZI



- Installation on DIN Rail 7.5 or 15mm
- Low profile installation
- Up to 240W output
- Unlimited number of connectable redundant power supplies
- Very compact dimensions
- UL, cUL listed
- TUV approved
- Ce and RoHS compliant

Product Description

This SPD additional module allows the connection of 1 power supply +1 or more additional redundant power supplies. In this case, the continuity of the 24VDC output is always guaranteed, even in case of failure of one power supply.

Ordering Key

SP M 2 RM 24 10

Model _____
 Enclosure (M = Modular DIN type) _____
 Number of DIN modules _____
 Redundant module _____
 Output voltage _____
 Maximum output current (A) _____

Approvals



Output Data

Output voltage drop	0.5V
Output maximum Current	10A
Max Reverse Voltage	30V

Input Data

Rated input Voltage	21...28VDC
Number of inputs	2
Maximum input current	10A

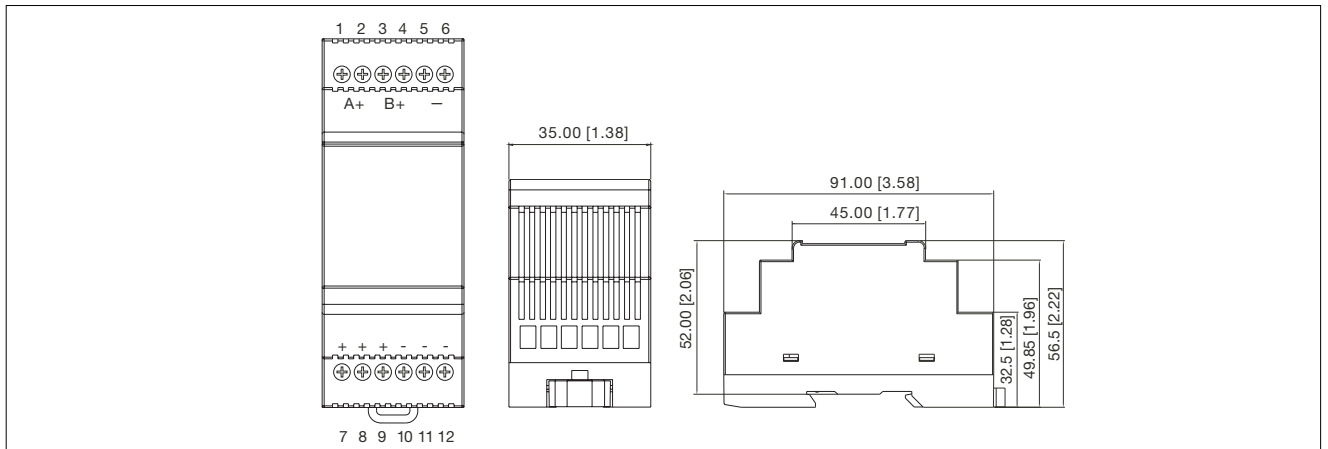
General Data

Operating temperature	-25°C...+71°C
Storage temperature	-25°C...+85°C
Relative Humidity	20...95%RH
MTBF (Bellcore issue 6 @ 40°C, GB)	9.697.000h
Case material	Plastic
Cooling	Free air convection
Dimensions L x W x D	91 x 35 x 56.55mm
Weight	75g

Approvals and EMC

Shock resistance	acc. to IEC 60068-2-27 (15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face)
Vibration resistance	acc. to IEC 60068-2-6 (Mounting by rail: 10-500 Hz, 2G, along X, Y, Z each Axis, 60 min for each Axis)
CE	EN 55022 Class B, EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-6, EN 61000-4-8, EN 61204-3

Mechanical Drawings mm (inches)

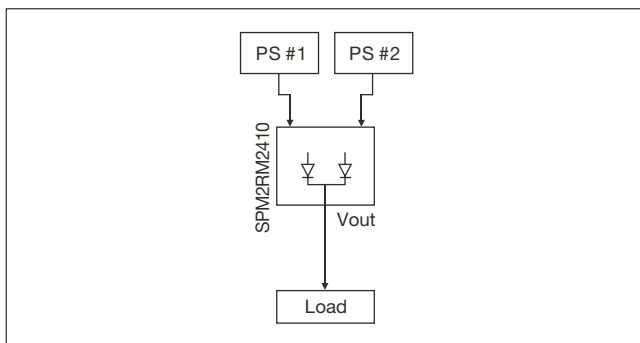


Pin Assignment and Front Controls

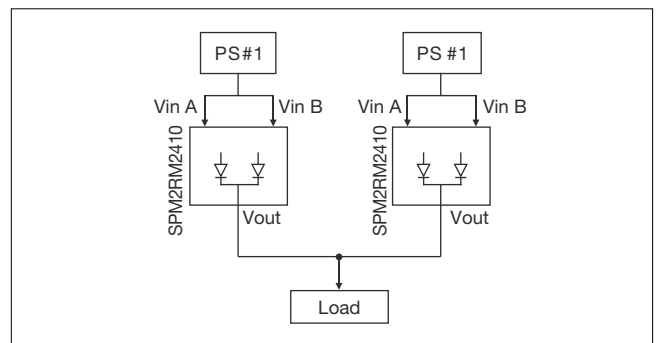
Pin No.	Designation	Description
1	Input A+	Positive Input power supply A
2	Input A+	Positive Input power supply A
3	Input B+	Positive Input power supply B
4	Input B+	Positive Input power supply B
5	Input -	Negative Input power supply
6	Input -	Negative Input power supply
7	Output +	Positive Output terminal
8	Output +	Positive Output terminal
9	Output +	Positive Output terminal
10	Output -	Negative Output terminal
11	Output -	Negative Output terminal
12	Output -	Negative Output terminal

Typical Application Notes

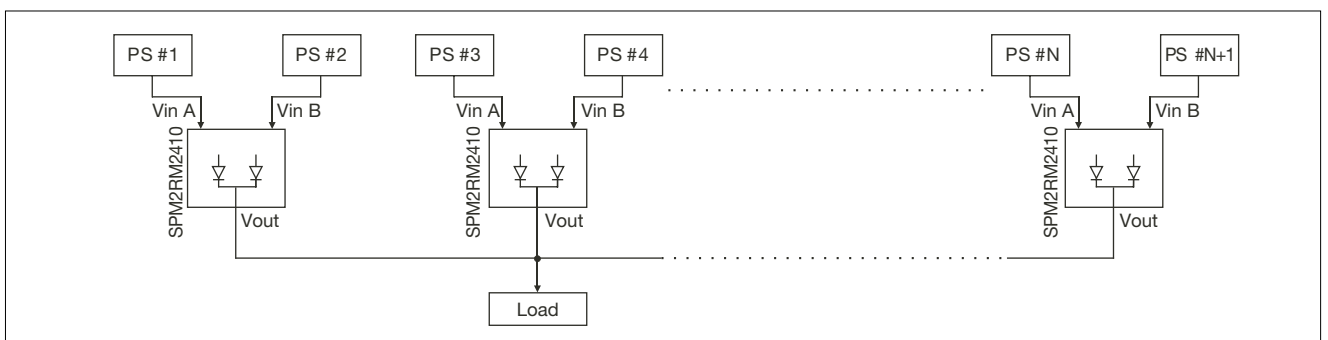
1.) 1+1 Redundancy: Using 1 more PS as the redundant unit.



2.) Single Use: Connecting only one PS to one SPD24RM20 to reduce the stress of the diodes and hence increase the reliability.

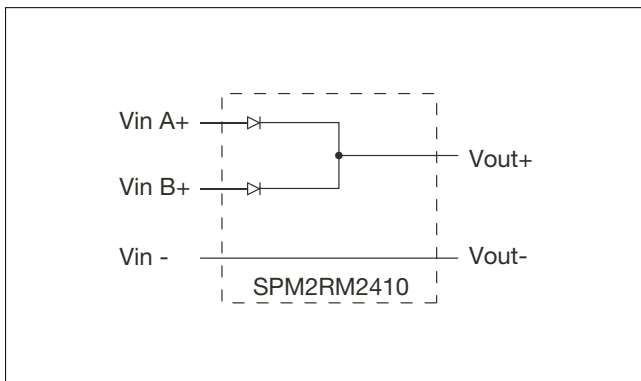


3.) 1+N Redundancy: Using more than one PS as redundant units to increase the reliability.





Circuit Diagram



Installation

Ventilation and cooling	Normal convection All sides 25mm free space for cooling is recommended
Screw terminals	10-24AWG flexible or solid cable 8mm stripping recommend
Max. torque for screws terminals	
Input terminals	1.008Nm (9.0lb-in)
Output terminals	0.616Nm (5.5lb-in)
Plug-in connectors	10-24AWG flexible or solid cable 7mm stripping recommend
Max. torque for plug-in terminals	
Input terminals	0.784Nm (7.0lb-in)
Output terminals	0.784Nm (7.0lb-in)