



SPUWM

POWER MANAGING MODULE

PRODUCT DESCRIPTION

The PMM module is a device with input overvoltage protection and internal redundant DCDC power supply system. On the same board, a microcontroller is able to individually command up to 16 output power supply channels.

In order to provide a redundant power supply system, a couple of DCDC converter is connected on the input of the PMM module. These DCDCs can work with a wide range of input voltage (V_{IN} from 200 V to 420 V) and can be set for an output voltage V_{OUT} from 12 V to 48 V and a nominal output power P_{OUT} equal to 500W. According with the trim settings, the two DCDC can be used with the same V_{OUT} (*Current Sharing*) or with non-equal output levels (*Active ORing*).

The output voltages coming from each DCDC device are then managed by a redundancy module. In order to increase the total system reliability. LEDs on the redundancy module allow easy check of the input and output health status.

The redundant power supply is then provided to 16 channels and can be switched on/off by an integrated microcontroller. Every output drive has its own adjustable overvoltage and overcurrent protection (up to 3 A). These protections allow that a fault on a channel does not damage other output channels or the entire boards.



PRODUCT FEATURES

ELECTRIC SPECIFICATIONS	
OC PROTECTION	Yes
OV PROTECTION	Yes
UV PROTECTION	Yes
SHORT CIRCUIT PROTECTION	Yes
THERMAL PROTECTION	Yes
INPUT VOLTAGE	$V_{IN} = 200 V \text{ to } 420 V$
OUTPUT VOLTAGE	$V_{OUT} = 12 V \text{ to } 48 V$
OUTPUT CURRENT	$I_{OUT} = 21.00 A \text{ (n.2 x } 10.50 A)$
OUTPUT POWER	$P_{OUT} = 1000 W \text{ (n.2 x } 500 W)$
OUTPUT CHANNELS	Up to 16

MECHANIC SPECIFICATIONS	
LENGTH	200 mm *
WIDTH	100 mm *

* measure customizable according with requested application

APPLICATIONS

- Sensor Systems
- Condition Monitoring
- Factory Sensors
- Process Instrumentation
- Weighing and Batching Systems
- Industrial Applications such as PLC, Control Network Modules, Battery-Operated Modules