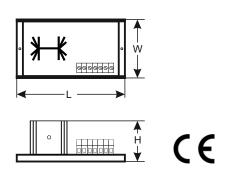
Pulsar

## CODE: DC/DC50SD v.1.0/II

## TYPE: DC/DC 5A Step down DC/DC converter with adjustable output voltage





## The module's features:

- Step down DC/DC converter with adjustable output voltage
- Example of use: step down from 24V to 12V DC
- The input voltage range: 8÷28V DC
- The output voltage range: 4,5÷24V DC
- The minimum difference between input (lowered) and output voltage: 2V
- The maximum load current 5A (60W)
- The PSU technical output indicating converter failure triggered by:
  - Short-circuit of the output
  - Output overload

- Protections:
  - Short-circuit protection SCP
  - Overload protection OLP
  - High efficiency: 92%
  - Optical LED indication
  - Warranty 2 years from the production date
  - Mounting:
    - Mounting strip with adhesive tape
    - · Mounting screws

## DESCRIPTION

The step down converter **DC/DC 5A (DC/DC50SD)** is used for step down the input voltage from the range between 8V+28V DC to the voltage range of **4,5V+24V DC** at the output, adjusted with the **V**<sub>ADJ</sub> potentiometer. The maximum load current is **Imax=5A (Pmax = 60W)**. The 2V difference between the input (lowered) and output voltage is required for the proper operation of the converter. The module does not feature galvanic isolation between input/output (IN-AUX) and operates on common "ground" (0V) potential (IN- and AUX- terminals are galvanically connected = common terminal).

The input voltage range (power supply)	8V÷28V DC
·····	depending on the range set by the jumper
The output voltage range	4,5V÷7V, 7V÷10V, 10V÷15V, 15V÷24V
···· · ·······························	Jumper adjustable.
	Factory setting: 12V.
The minimum difference between the input and	2V
output voltage	
P module power	60W max.
Energy efficiency	85%÷ 92%
Ripple voltage	80mV p-p max
Output current	5A max.
Current consumption by module systems	20 mA max.
Short-circuit protection SCP	electronic, automatic recovery
Overload protection OLP	110-150% of the module's power, manual restart (the failure
•	requires disconnection of the DC output circuit)
Technical outputs	
<ul> <li>PSU output indicating failure – overload or short-</li> </ul>	- OC type, 50mA max. Failure status: hi-Z state (high
circuit in the AUX output	impedance), normal status: L level (0V)
Optical indication	
- IN LED indicating DC power status	- red, normal status: is lit continuously
- AUX LED indicating DC supply status at the output	- green, normal status: is lit continuously
- PSU LED indicating failure - overload or short-	- red, normal status: does not lit, failure: is lit continuously
circuit in the AUX output	
Operating conditions	Il environmental class, -10°C ÷40°C, ensure air flow around
	the unit for convection cooling
Dimensions	L=140, W=43, H=45 [+/- 2mm]
Net/gross weight	0,15/0,20 kg
Mounting	mounting tape or mounting screw x 2
Declarations, warranty	CE, 2 years from the production date

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