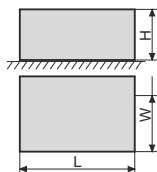


CODE: **DC/DC50SD** v.1.0/II

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_{ADJ} potentiometer. The maximum load current is **$I_{max}=5A$ ($P_{max} = 60W$)**. 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 output voltage	2V
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 - PSU output indicating failure – overload or short-circuit in the AUX output	- OC type, 50mA max. Failure status: hi-Z state (high impedance), normal status: L level (0V)
Optical indication - IN LED indicating DC power status - AUX LED indicating DC supply status at the output - PSU LED indicating failure - overload or short-circuit in the AUX output	- red, normal status: is lit continuously - green, normal status: is lit continuously - red, normal status: does not lit, failure: is lit continuously
Operating conditions	II environmental class, -10°C ÷40°C, ensure air flow around the unit for convection cooling
Dimensions	140 x 43 x 45 (L x W x H)
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