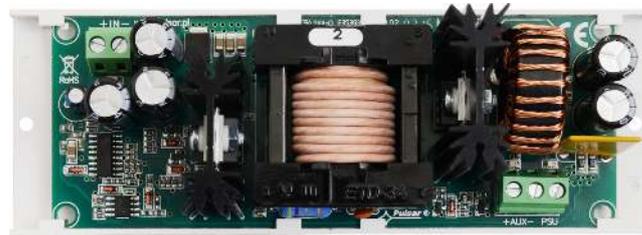
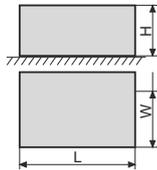


CODE: **DC/DC50SE** v.1.0/l  
 TYPE: **DC/DC 5A Step up / step down DC/DC converter 12V**



### The module's features:

- The DC/DC voltage- step up / step down converter
- Example of use: increasing voltage from 9,5V to 12V DC or lowering voltage from 16V to 12V DC
- The input voltage range: 9,5÷16V DC
- The output voltage range: 12V DC
- 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: 87%
- Optical LED indication
- Warranty – 2 years from the production date
- Mounting:
  - Mounting strip with adhesive tape
  - Mounting screws

### DESCRIPTION

The **DC/DC 5A (DC/DC50SE)** voltage- step up / step down converter is used for maintaining a constant output voltage 12V DC, regardless of the input voltage fluctuations in the range of **9,5V ÷ 16V DC**. When the input voltage at the output is lower to 12V DC, the converter increases it to the value. When the input voltage at the output is higher than needed, the converter lowers it to 12V DC. The maximum load current is **Imax=5A (Pmax=60W)**. 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).

<b>The input voltage range (power supply)</b>	9,5V÷16V DC
<b>The output voltage range</b>	12V DC
<b>P module power</b>	60W max.
<b>Energy efficiency</b>	85% ÷ 87%
<b>Ripple voltage</b>	50mV p-p max.
<b>Output current</b>	5A max.
<b>Current consumption by module systems</b>	45 mA max.
<b>Short-circuit protection SCP</b>	electronic, automatic recovery
<b>Overload protection OLP</b>	110-150% of the module's power, manual restart (the failure requires disconnection of the DC output circuit)
<b>Technical outputs</b> - 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)
<b>Optical indication</b> - 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
<b>Operating conditions</b>	II environmental class, -10°C +40°C, ensure air flow around the unit for convection cooling
<b>Dimensions</b>	150 x 50 x 60 (L x W x H)
<b>Net/gross weight</b>	0,25/0,27 kg
<b>Mounting</b>	mounting tape or mounting screw x 2
<b>Declarations, warranty</b>	CE, 2 years from the production date