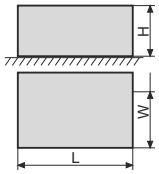
EN

CODE: **DC/DC10SE** v.1.0/II
TYPE: **DC/DC 1A Step up/step down DC/DC converter with adjustable output voltage**



The module's features:

- The DC/DC voltage- step up / step down converter with adjustable output voltage
- Example of use: increasing voltage from 9,5V to 12V DC or lowering voltage from 16V to 9V DC
- The input voltage range: 9,5÷16V DC
- The output voltage range: 5÷15V DC
- The maximum load current 1A (12W)
- 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: 82%
- Optical LED indication
- Warranty – 2 years from the production date
- Mounting:
  - Mounting strip with adhesive tape
  - Mounting screws

DESCRIPTION

The **DC/DC 1A (DC/DC10SE)** voltage- step up / step down converter is used for maintaining a constant output voltage in the range between **5÷15V DC**, adjusted with the V_{ADJ} potentiometer, regardless of the input voltage fluctuations in the range of 9,5V ÷ 16V. When the input voltage at the output is lower than needed, the converter increases it to the set value. When the input voltage at the output is higher than needed, the converter lowers it to the needed value set by the V_{ADJ} potentiometer. The maximum load current is **Imax=1A (Pmax = 12W)**. 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)	9,5V÷16V DC
The output voltage range	5V÷15V, factory setting: 12V
P module power	12W max.
Energy efficiency	76%÷ 82%
Ripple voltage	60mV p-p max
Output current	1A max.
Current consumption by module systems	15 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	100 x 43 x 27 (L x W x H)
Net/gross weight	0,05/0,07 kg
Mounting	mounting tape or mounting screw x 2
Declarations, warranty	CE, 2 years from the production date