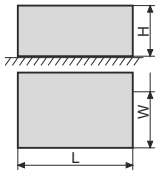


CODE: **DC/DC10SD** v.1.0/III

TYPE: **DC/DC 1A 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÷19V DC
- The minimum difference between input (lowered) and output voltage: 3V
- 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
 - OHP overheating protection
- High efficiency: 80÷93%
- Optical LED indication
- Warranty – 2 year from the production date
- Mounting:
 - Mounting strip with adhesive tape
 - Mounting screws

DESCRIPTION

The step down converter **DC/DC 1A (DC/DC10SD)** is used for step down the input voltage from the range between 8V÷28V DC to the voltage range of 4,5V÷19V DC at the output, adjusted with the P1 potentiometer. The maximum load current is **I_{max}=1A (P_{max}=12W)**. The 3V 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	8V÷28V DC depending on the range set by the jumper
The output voltage range	4,5V÷6V, 6V÷9V, 9V÷13V, 13V÷19V Jumper adjustable. Factory setting: 12V.
The minimum difference between the input and output voltage	3V
P module power	12W max.
Energy efficiency	80%+ 90% for full range of power and loads
Ripple voltage	20mV p-p...50mV p-p
Output current	1A max.
Current consumption by module systems	10 mA max.
Short-circuit protection SCP and overload protection OLP	180% - 200% of module power - output power limit, automatic return after elimination of short circuit
Technical outputs - PSU output indicating failure	- 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	- 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	80 x 43 x 27 (L x W x H)
Net/gross weight	0,04/0,06 kg
Mounting	mounting tape or mounting screw x 2
Declaration, warranty	CE, 2 year from the production date