Pulsar

EN

## CODE: **DC/DC30SD** v.1.0/II

TYPE: DC/DC 3A Step down DC/DC converter with adjustable output voltage.



## CE

## 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 3A (36W)
- The PSU technical output indicating converter failure triggered by:
  - Short-circuit of the output
  - Output overload

- Protections:
   Short-ci
  - Short-circuit protection SCP
    Overload protection OLP
  - High efficiency: 93%
- Align enciency: 93%
  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 3A** (**DC/DC30SD**) 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=3A** (**Pmax = 36W**). 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	36W max.
Energy efficiency	86%÷93%
Ripple voltage	80mV p-p max
Output current	3A 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-	- 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	<ul> <li>red, normal status: is lit continuously</li> </ul>
- 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	II environmental class, -10°C ÷40°C, ensure air flow around
	the unit for convection cooling
Dimensions	130 x 43 x 45 (L x W x H)
Net/gross weight	0,15/0,18 kg
Mounting	mounting tape or mounting screw x2
Declarations, warranty	CE, 2 years from the production date