Pulsar

EN

CE

## CODE: DC/DC20SD v.1.0/III

## TYPE: DC/DC 2A 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 2A (24W)
- The AW 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÷90%
- 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 2A (DC/DC20SD)** 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 P1 potentiometer. The maximum load current is **Imax=2A (Pmax=24W)**. 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 (power supply)	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	24W max.
Energy efficiency	80%÷ 90% for full range of power and loads
Ripple voltage	20mV p-p50mV p-p
Output current	2A max.
Current consumption by module systems	10 mA max.
Short-circuit protection SCP and overload	180% - 200% of module power - output power limit,
protection OLP	automatic return after elimination of short circuit
Technical outputs	
<ul> <li>AW output indicating failure</li> </ul>	- OC type, 50mA max. Failure status: hi-Z state (high
	impedance), normal status: L level (0V)
Optical indication	
- IN LED indicating DC power status	- red, normal status: is lit continuously
- AUX LED indicating DC supply status at the output	- green, normal status: is lit continuously
- AW LED indicating failure	- 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	0,05/0,08 kg
Mounting	mounting tape or mounting screw x 2
Declarations, warranty	CE, 2 years from the production date