

DC/DC Voltage Converter

Features:

- Wide input voltage range: 16-32V
- High efficiency =>94% for Vin=28V
- Low level of output voltage ripples: 30mV p-p
- Thermal protection at 80°C
- Electronic short-circuit protection maintenance-free
- Overcurrent protection implemented on the positive side
- Compact size
- Full SMD assembly
- Compliance with CE, RoHS, 97/24/EC-C08, EN1175 standards

Applications:

- Telecommunications
- Buffered systems
- Alarms
- Intercoms
- Telemetric applications
- Lighting
- Monitoring



- Power over Ethernet (POE)
- Automation
- Fiber optic networks
- Wi-fi networks
- Access control systems

Product Description:

The PO-V5 converter is the fifth version of the popular converter designed for powering devices with a current consumption of up to 8A from a 24V voltage source. It finds applications wherever a stable voltage lower than the supply voltage is needed.

It is well suited for powering devices from buffered systems with a nominal voltage of 24V (e.g., with MB500 buffering modules).

The main advantages of the device include high efficiency reaching up to 94%, compact size, low level of output voltage ripples, low cost, and the use of components and design solutions based on the latest achievements in the field of pulse energy conversion.

Thanks to the applied housing radiator, forced air circulation for ambient temperatures up to 45 degrees Celsius is unnecessary. For higher ambient temperatures and rated power, forced air circulation is recommended.

The circuit has overload protection in the form of thermal protection for the key circuit elements at a temperature of 80°C.

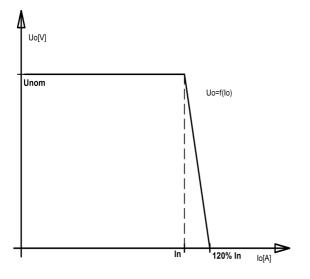
The short-circuit protection causes a reduction in the output voltage and restores the nominal voltage after the short circuit is removed. There is also a Plus version of the device available, which has 50% higher current efficiency.

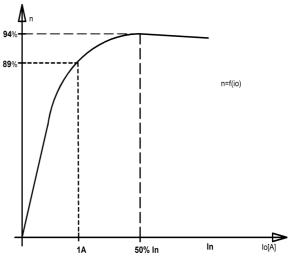
Parameters:

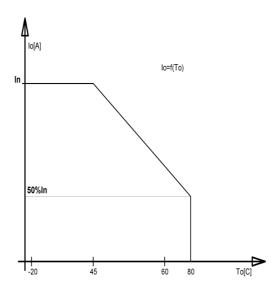
Parameter	Minimum	Average	Maximum	Unit
Operating	-30	20	80	°C
Temperature				
Output Ripple	15	25	30	mV
Operating Frequency	250	300	350	khz
Current Consumption		20	30	mA
without Load				
Thermal Protection	75	80	82	°C
Input Voltage Noise	35/10	37/20	40/60	V/s
Immunity				

Versions	24/12.8V	24/12V	24/9V	12-24/5V	12-24/3.3V	48/12V	48/24V
POv5	8A	8A	8A	10A	10A	8A	4A
Input Voltage Range	18-32V	16-32V	16-32V	11-32V	11-32V	40-56V	40-56V

Characteristics:







Mounting Template:

