

# Power Supply

full rugged

# AC300

power supply



The AC/DC adapter AC300 is a new roda design based on a LLC topology for power up to 300 watt. The LLC resonant topology allows for zero voltage switching of the main switches thereby dramatically lowering switching losses. Moreover there is a synchronous rectification control on the secondary side that leads to a boosted efficiency. Efficiencies of > 98% can be achieved with LLC resonant converter.

Besides above, the special feature of this MIL power supply is best EMC properties according to MIL-STD-461G as well as a frequency range of 50 Hz, 60 Hz and 400 Hz. The hardened and powder-coated aluminum chassis makes it dust, vibration and water resistant and meet the environmental requirements of MIL-STD-810G. Connectors on AC and DC side are freely selectable.

- 110 V<sub>AC</sub> 60/400 Hz
- 230 V<sub>AC</sub> 50 Hz
- compact and robust set-up
- shielded Aluminium-Housing
- transient protection
- LED-indicator
- ingress protection IP65
- high efficiency
- active PFC
- short circuit proof (output)
- overvoltage and current proof (output)
- overtemperature protection
- temperature: -20°C to +60°C
- environmental conditions designed to meet MIL-STD-810G/461G
- connector and cable type customizable

Type	Input	Output	Current	Power
AC-300-12		12 V <sub>DC</sub> ±5%	25.00 A	
AC-300-19	110 V <sub>AC</sub> 60/400 Hz 230 V <sub>AC</sub> 50 Hz	19 V <sub>DC</sub> ±5%	15.79 A	300 W
AC-300-24		24 V <sub>DC</sub> ±5%	12.50 A	

## Input Variables

<b>Input voltage</b>	110 V <sub>AC</sub> (60 Hz), 110 V <sub>AC</sub> (400 Hz),
<b>Frequency</b>	230 V <sub>AC</sub> (50 Hz)
<b>Input current</b>	typical 3.0 A (115 V <sub>AC</sub> ) typical 1.5 A (230 V <sub>AC</sub> )
<b>Fuse</b>	internal
<b>Isolation</b>	input-output: 3000 V <sub>AC</sub> input-chassis: 1500 V <sub>AC</sub>
<b>Efficiency</b>	50/60 Hz typical > 90 % 400 Hz typical > 85 %
<b>Connections (cables)</b>	power cord (Schuko/NEMA)
<b>Cable length</b>	147 ± 5 cm

## General

<b>Safety</b>	EN 62368-1
<b>CE-Conformity</b>	manufacturer declaration
<b>Environmental</b>	design to meet MIL-STD-810G MIL-STD-461G
<b>Cooling</b>	convection cooling
<b>LED indicators</b>	output: 1 LED green

## Output Variables

<b>Output voltage</b>	single output (see previous page) others upon request
<b>Tolerance</b>	±5% typ.
<b>Output power</b>	300 Watt (max.) -20°C to +60°C
<b>Residual ripple</b>	< 100 mV
<b>Connections (cables)</b>	connector: customer request
<b>Cable length</b>	ca. 115 cm
<b>Resistance</b>	short circuit, overvoltage and overload proof

## Mechanics

<b>Housing</b>	milled aluminum
<b>Colour</b>	RAL9005 black other colours upon request
<b>Ingress Protection</b>	IP65
<b>Dimensions</b>	approx. 237 x 118 x 49 mm (w/o cable fitting)
<b>Weight</b>	approx. < 2.4 kg