

Highly reliable medical AC/DC power supplies that help to rescue lives

New Open-Frame 300 Watt Medical Grade Power Supply in 4"x2" Size



MAF300 Series
AC/DC Power Supplies

Output Power	Input Range	Output Voltage	Insulation	Leakage Current	Over Voltage Category
300W 360W for 5sec.	85 - 264Vac 120 - 370Vdc	12, 15, 18, 24, 28, 36, 48, 53 Vdc	2xMOPP 4000 Vac Reinforced insulation	100µA max.	OVC II

P-DUKE has added a new 300W output power series, MAF300, to its medical grade AC/DC power supplies portfolio range from 15W to 450W. MAF300 is designed for dedicated medical applications with the highest insulation of 2xMOPP, in accordance with IEC 60601-1. It has a low leakage current of less than 100µA which makes it suitable for BF (body floating) medical equipment. The high conversion efficiency of up to 93% and the power consumption of less than 300mW allows for a power module design in a compact 4"x2" dimension with a power density of up to 24.92W/in³. Additionally, its output can deliver up to 360W peak power for 5 seconds to support a variety of automation systems and motor/valve devices in the medical field.

MAF300 features 4000Vac input to output isolation, an operating altitude of up to 5000m and a broad operating ambient temperature range from -40 to +85°C which make MAF300 very suitable for any harsh environment applications. It comes in 4x2 inch open frame versions, optional encased versions or DIN-rail versions with a universal input range of 85 to 264 Vac and especially supports 120-370Vdc input range. This series provides 12, 15, 18, 24, 28, 36, 48, 53 Vdc single output voltages. The output voltage can be easily adjusted up to ±10% with the integrated potentiometer. A 12Vdc auxiliary output is available for a temperature controlled variable speed fan. The optional remote control and power good signal offer a convenient approach to controlling and monitoring the unit. They have the following protection functions: over-voltage protection (latch mode), over-current protection (hiccup mode and auto-recovery), short-circuit protection (continuous and auto-recovery) and over-temperature protection (sensed by an internal thermistor; hiccup mode and auto-recovery).

ISO 14971 risk management file is available to support designers in their risk analysis end evaluation on their system.

The MAF300 power supplies have been certified to the following standards:

IEC/EN/UL 62368-1

IEC/EN/ANSI/AAMI ES 60601-1

ISO 14971 Risk Management File

Conducted emissions: EN 55032 Class B

Radiated emissions: EN 55032 Class A

MAF300 has the most compact design within the same power range of power supplies, it is ideal for medical diagnostic equipment such as MRI scanners, laser treatment, X-ray and patient monitoring, etc.



FEATURES

- Medical certification IEC/EN/ANSI/AAMI 60601-1
- 4000Vac reinforced 2xMOPP insulation
- Low leakage current < 100µA
- Forced air cooling 300W continuous and 360W peak output power
- Compact size in 4x2 inch package
- Wide operating temperatures -40°C to +85°C
- Operating altitude 5000 meter
- 5 years Product Warranty

P-DUKE has been respecting and emphasizing the importance of Intellectual Property Rights. We have obtained multinational patents so far. To all the advanced companies in this industry, do not violate our Intellectual Property. Once any enterprises or individuals are found guilty of the infringement of intellectual property rights may be subject to investigate. P-DUKE has the right to protect our customers and be responsible for shareholders' equity. P-DUKE's patents include the following: US 7,894,214 B1, US 8,817,495 B2, Nr. 20 2010 006 407.4, ZL 2011 2 C088132.5 ...