BPA-Series Microwave Generators
for 10 kW 2.45 GHz Microwave Output Power

GENERAL INFORMATION

The BPA10kW microwave generator is an air-cooled power supply for a 10 kW / 2.45 GHz magnetron. This power supply is designed based on modular interleaving technology to reduce input and output ripple as well as having the ability to protect the magnetron from over voltage and over current.

The BPA10kW autonomously manages the operating status of the magnetron and adjusts the filament voltage according to the input power of the magnetron and switches off the output when alarm events such as overcurrent or overvoltage of the magnetron occur. It is built into a self-ventilated 19" aluminum housing with the 5-U height.

FEATURES

- Air cooling
- Resonance isolated ZCS/ZVS high frequency topology
- Supports all 10 kW Magnetrons on the market
- High efficiency
- Modular design - the SMPS can continue operating at lower power even if one (or more) module/cell fails
- High accuracy output current control
- Low ripple anode current
- Protections: Over temperature/ Over current/ Overvoltage/ Over load/ Under voltage/ Under load/ Short circuit
- High reliability (designed based on MIL-HDBK-338B and MIL-HDBK-217 standards)
- Able to be connect in parallel with similar SMPS
- Low noise SMPS
- Ability to control by PLC, PC, or Profinet

SPECIFICATION

Electrical and Technical Data

	BPA10kW380	BPA10kW400	BPA10kW480	BPA10kW600
Input voltage	380 V_{AC} ±10 %	400 V_{AC} ±10 %	480 V_{AC} ±10 %	600 V_{AC} ±10 %
Efficiency	up to 95 %	up to 96 %	up to 96 %	up to 97 %
Input frequency	47 Hz to 63 Hz			
Magnetron output power	1000 W to 10000 W			
Output voltage adaptivity	160 mA to 1600 mA			
Anode current variation range	8 kV to 10 kV			
Active operating temperature	-20 °C to 50 °C			
Working humidity	20 % to 90 % RH non-condensing			
Storage temperature, humidity	-30 °C to +70 °C, 10 % to 95 % RH non-condensing			
Withstand voltage	20 kV			

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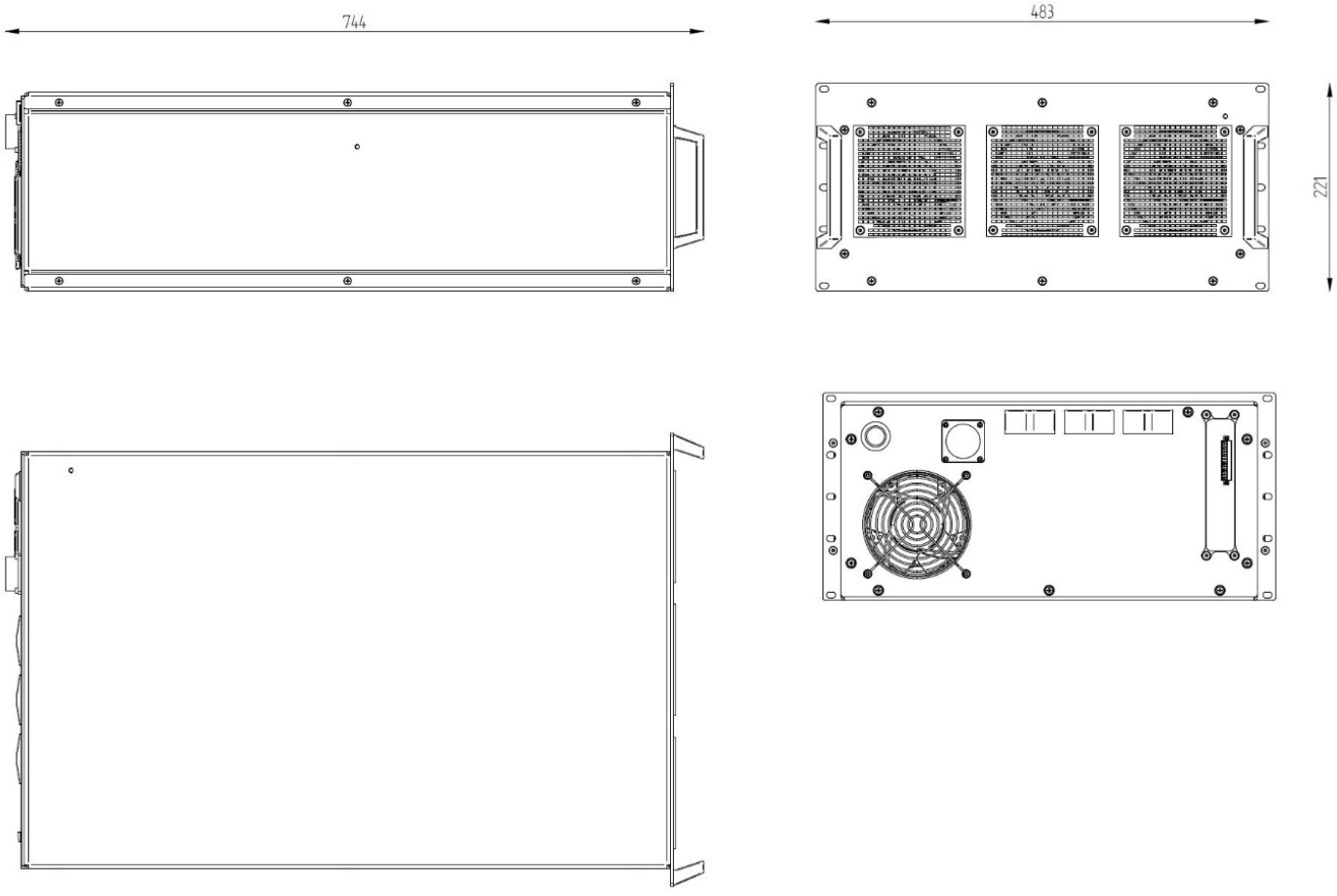
SPECIFICATION

Electrical and Technical Data

Measurement Unit Size (WxHxD)	744 x 221 x 483 mm



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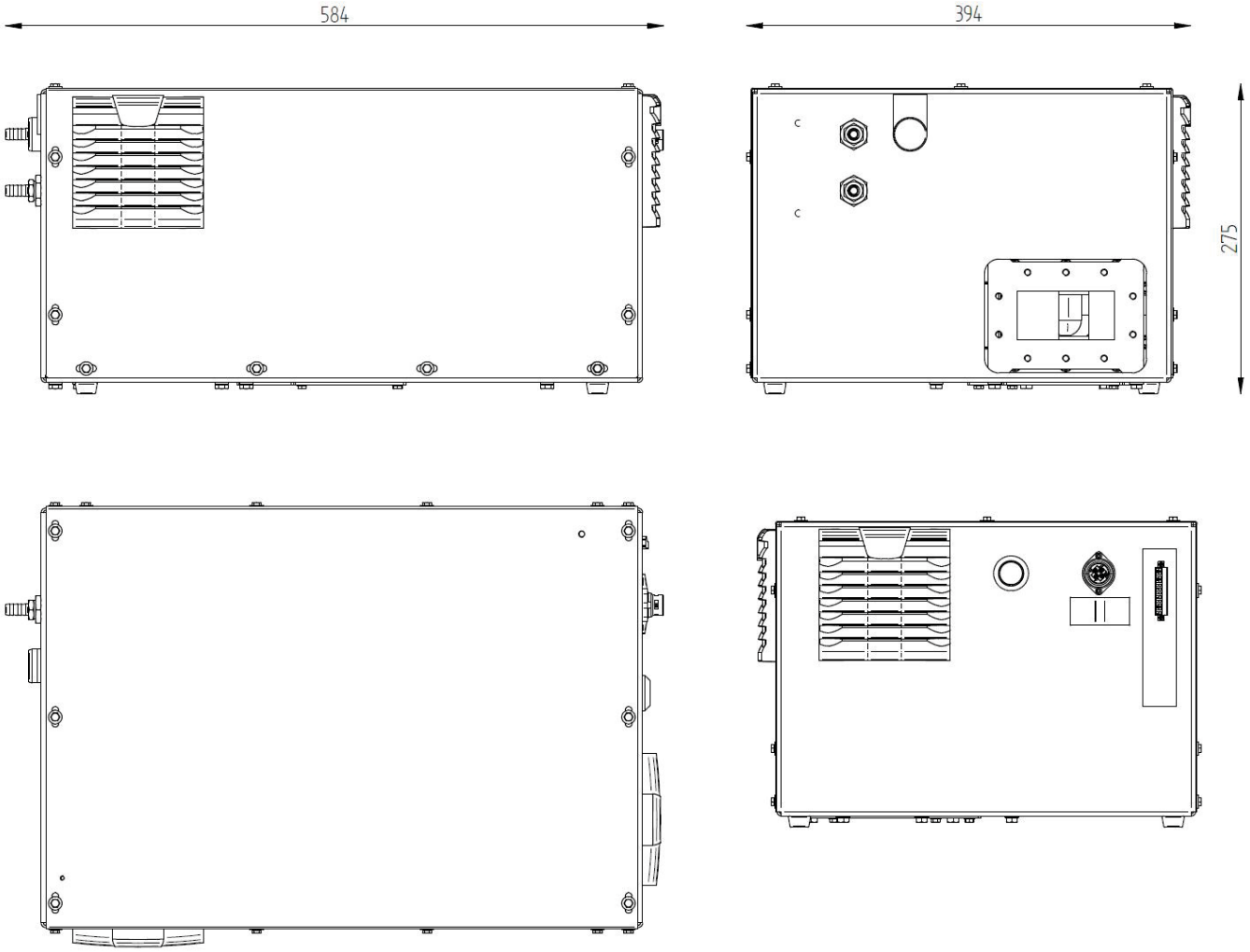
SPECIFICATION

Electrical and Technical Data

Measurement Unit Size (WxHxD)	584 x 275 x 394 mm



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