

AIR COOLED LOW RIPPLE SWITCH MODE POWER SUPPLY

FM - PS6kW MAGNETRON / 2.45 GHz

:fm



GENERAL INFORMATION

FM - Low Ripple Switch Mode Power Supply for 6 kW Magnetrons @ 2.45 GHz is a series of aircooled power switch supplies. This model is able to power all 6 kW @ 2.45 GHz magnetrons on the market. Its output power can be regulated continuously between 600 - 6000 W by controlling through the PLC interface or fieldbus interface. The mains supply is available for 400, 440 and 575 V and working perfectly with FM-PS 6kW Magnetrons Microwave Head.

It can also power other manufacturers' microwave heads, when electrically compatible. Additionally this model has many innovative protective features that enable the machine to work independently and always in a safe operating state.

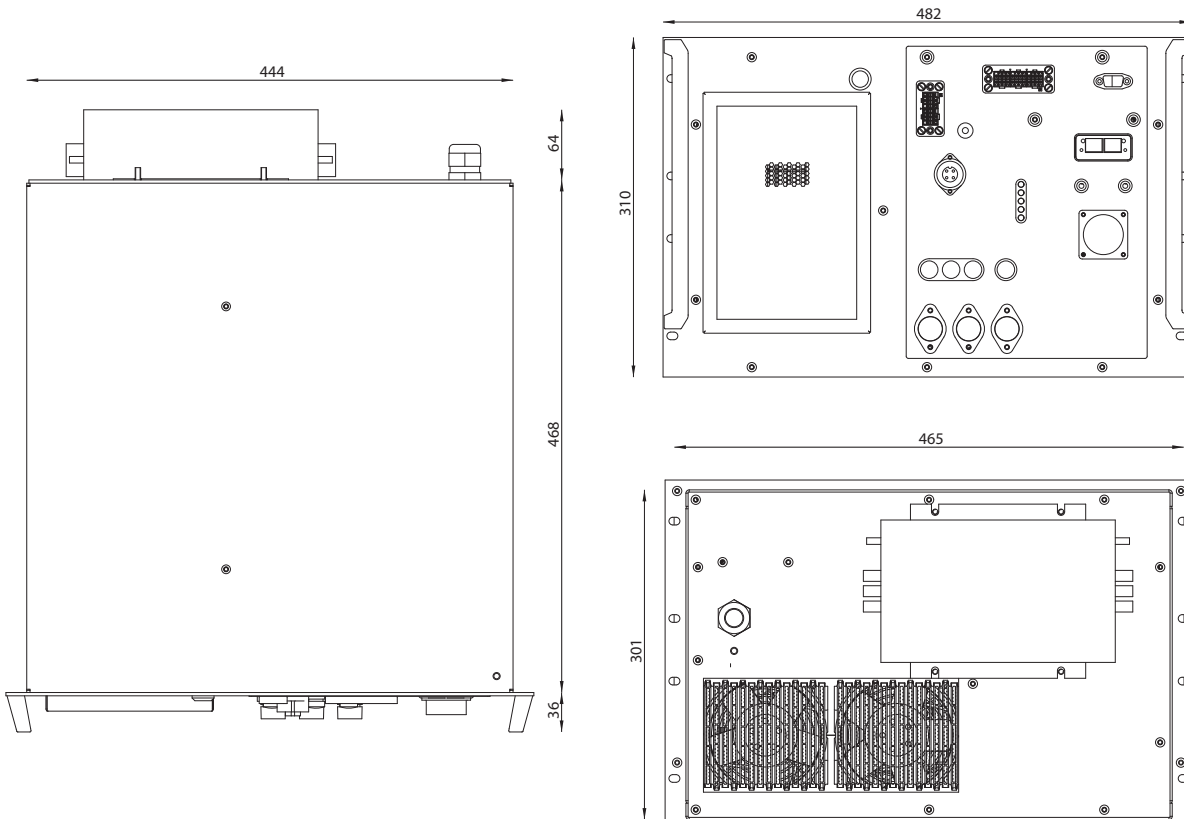
KEY FEATURES I TECHNICAL DETAILS

- 19" rack mounted
- Low Ripple Current $\leq 2\%$, ideally for plasma applications and most other applications
- CE- and CSA- Approval
- Stable filament control prolong the magnetron life
- Microcontroller based monitoring and controlling of all important Magnetron Operating Parameters like High Voltage, Current and Microwave
- Sophisticated Design allows the generator always working at the ideal operating point (high efficiency and longer magnetron lifespan)
- Low electromagnetic interference, improved fail-safe design against electromagnetic interference's
- Protective features to guard the magnetron and itself against failures
- Improved protective design to guard the person who accidentally touched the High Voltage
- Advanced alarm handling, all alarms can be displayed in a plain text Fieldbus-Interface
- Two different control options to suit most application requirements (e.g. PLC control or fieldbus control capabilities)

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SPECIFICATION

Electrical and Technical Data

Input

Line Input

3 x 400 V

3 x 440 V_{AC}

Line Frequency

50 / 60 Hz

Input Power

9.92 kVA @ 400 V_{AC}

Maximum intake current

15.3A @ 380 V_{AC}

Output

Output Power Magnetron

6000 W

Output Current

1100 mA

Filament

Adjustable for all type of Magnetrons

Control / Monitoring

Interface

Profinet

Cooling

Air Cooling (with built-in fans)

Intake Airflow

Appx. 260 m³/h

Mechanical Data

Rackable

19" x 7U (482 x 311 mm)

Total Weight

Appx. 45 kg

Ambient Conditions

Ripple

≤ 2 %

Operation mode

Continuous operation or Pulse

Ambient Temperature

Max. 40°C operating

Relative Humidity

80% @ 30°C to 50% @ 40°C

Efficiency

>90%