

AIR COOLED LOW RIPPLE SWITCH MODE POWER SUPPLY

FM - PS5kW MAGNETRON / 915 MHz

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GENERAL INFORMATION

FM - Low Ripple Switch Mode Power Supply for 5 kW Magnetrons @ 915 MHz is a series of aircooled power switch supplies. This model is able to power all 5 kW @ 915 MHz magnetrons on the market. Its output power can be regulated continuously between 500 - 5000 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 5kW 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.

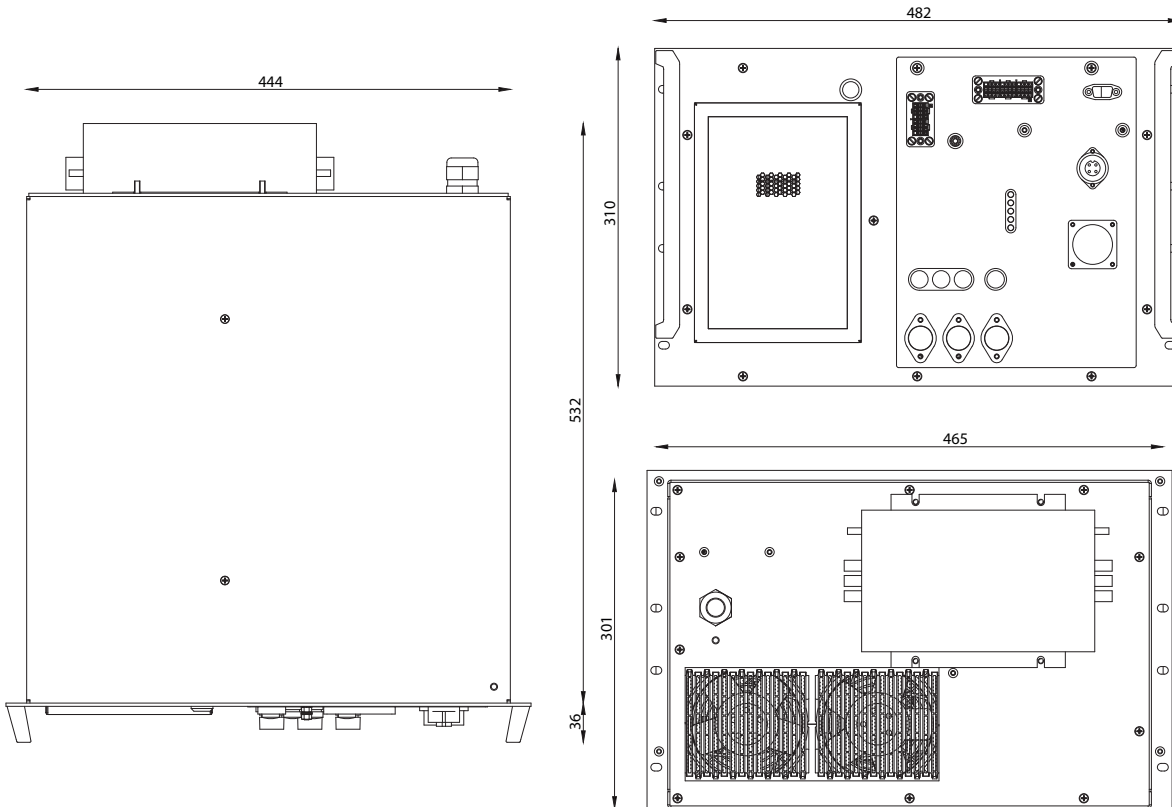
KEY FEATURES I TECHNICAL DETAILS

- 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_{AC}
3 x 440 V_{AC}
3 x 575 V_{AC}
50 / 60 Hz
8.3 kVA @ 400 V_{AC}
12.5A @ 380 V_{AC}

Line Frequency

Input Power

Maximum intake current

Output

Output Power Magnetron

Output Current

Filament

5000 W
850 mA
Adjustable for all type of Magnetrons

Control / Monitoring

Power Adjustment Signal Range

Interface

0-10 V_{DC}
analog PLC

Cooling

Air Cooling (with built-in fans)

Intake Airflow

Appx. 260 m³/h

Mechanical Data

Rackable

Total Weight

19" x 7U (482 x 311 mm)
Appx. 45 kg

Ambient Conditions

Use

Operation mode

Ambient Temperature

Relative Humidity

Efficiency

Indoor use only
Continous operation
Max. 40°C operating
80% @ 30°C to 50% @ 40°C
>90%