

WATER COOLED LOW RIPPLE SWITCH MODE POWER SUPPLY WITH TOUCH DISPLAY

FM - PS10kW MAGNETRON / 2.45 GHz



GENERAL INFORMATION

FM - Low Ripple Switch Mode Power Supply with Touch Display for 10 kW Magnetrons @ 2.45 GHz is a water and aircooled power. This model is able to power all 10 kW @ 2.45 GHz magnetrons on the market. Its output power can be regulated continuously between 1000 - 10000 W by controlling through the PLC interface or fieldbus interface. The mains supply is available for 400 V and working perfectly with FM-PS 10kW 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.

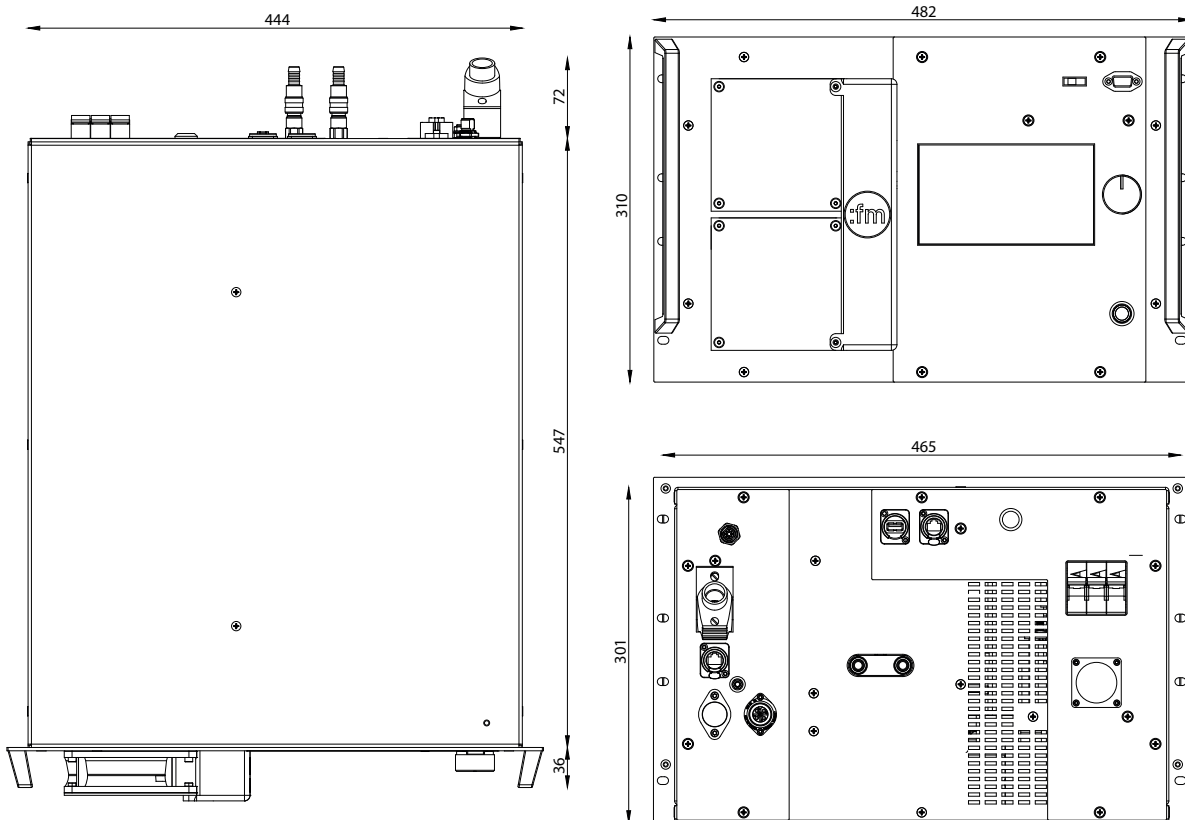
KEY FEATURES I TECHNICAL DETAILS

- 7 inch Touch Display
- 19" rack mounted
- Low Ripple Current $\leq 2\%$, ideally for plasma applications and most other applications
- CE 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

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SPECIFICATION

Electrical and Technical Data

Input

Line Input	3 x 400 V _{AC}
Line Frequency	50 / 60 Hz
Input Power	16.7 kVA @ 400 V _{AC}
Maximum intake current	25.5 A @ 380 V _{AC}

Output

Output Power Magnetron	10000 W
Output Current	1600 mA
Filament	Adjustable for all types of Magnetrons

Control / Monitoring

Interface	Profinet or Touch Display
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Cooling

Air Cooling (with built-in fans)

Intake Airflow	Appx. 125 m ³ /h
water flow	4 l/m
water temp	20-25 °C

Mechanical Data

Rackable	19" x 7U (482 x 311 mm)
Total Weight	Appx. 43 kg

Ambient Conditions

Ripple	≤ 2 %
Operation mode	Continous operation or Pulse
Ambient Temperature	Max. 40°C operating
Relative Humidity	80% @ 30°C to 50% @ 40°C
Efficiency	>90%