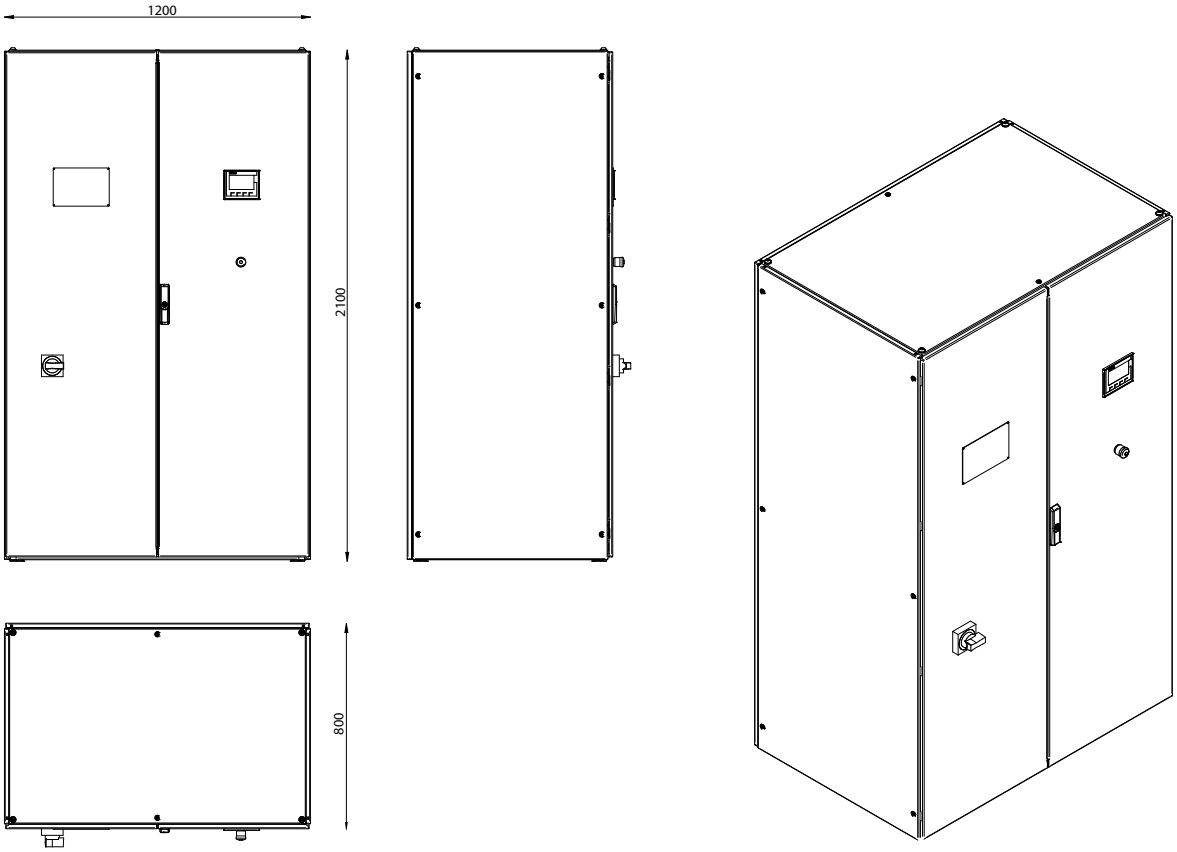
MICROWAVE GENERATOR
FM - 75kW / 915MHz

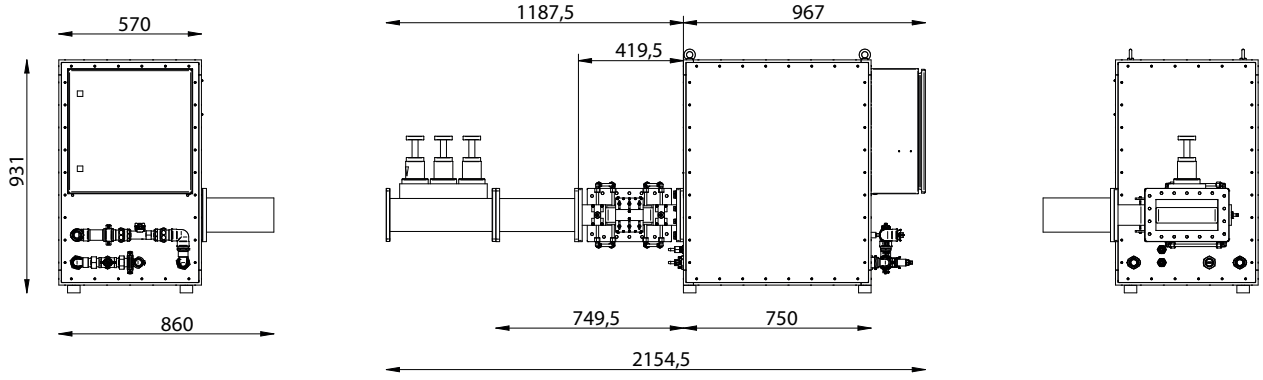
KEY FEATURES I TECHNICAL DETAILS

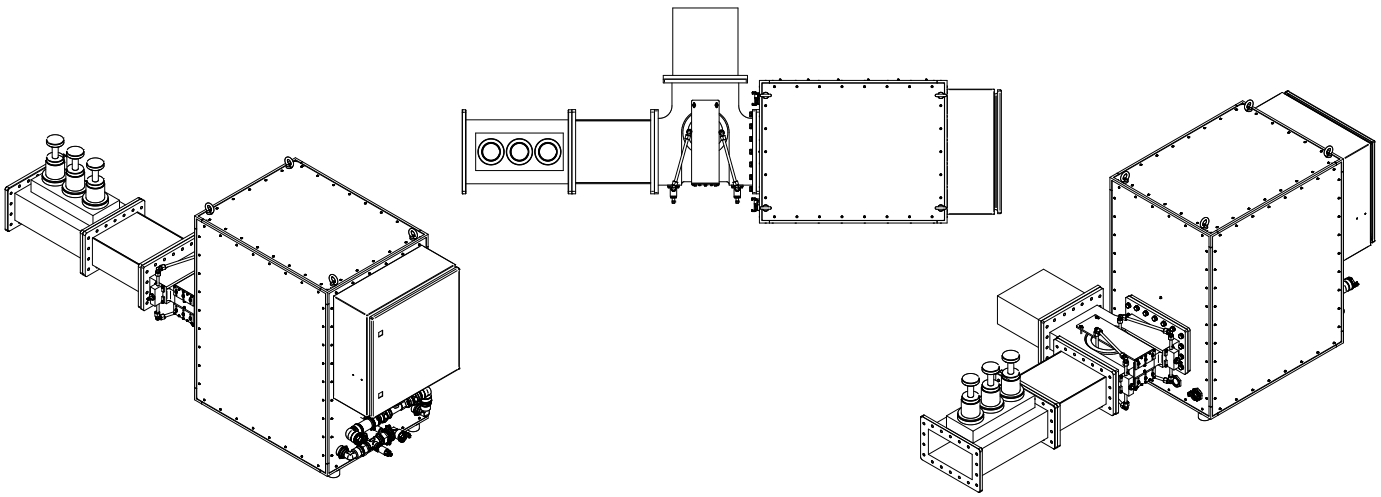
- Stable filament control prolong the magnetron life
- Microcontroller based monitoring and controlling of all important magnetron operating parameters like high voltage, current and microwave
- Protective features to guard the magnetron and the generator against failures
- Sophisticated design allows the generator always working at the ideal operating point (high efficiency and longer magnetron lifespan)
- Advanced alarm indication, all alarms are displayed in a plain text
- The microwave generator is operated via a 4'' Siemens touch panel
- In addition, it is possible to remotely control the microwave generator via a higher-level PLC control with Profinet
- The complete cooling water distribution and monitoring is integrated in the microwave generator. It is only necessary for the customer to install a fine filter.

:fm Fricke und Mallah Microwave Technology GmbH
Werner-Nordmeyer-Str. 25 I 31226 Peine I Germany
Tel.: +49 (0) 5171 54 57-0 I Fax: +49 (0) 5171 54 57-26
info@microwaveheating.net I www.microwaveheating.net

MICROWAVE GENERATOR
FM - 75kW / 915MHz







:fm Fricke und Mallah Microwave Technology GmbH
Werner-Nordmeyer-Str. 25 I 31226 Peine I Germany
Tel.: +49 (0) 5171 54 57-0 I Fax: +49 (0) 5171 54 57-26
info@microwaveheating.net I www.microwaveheating.net

MICROWAVE GENERATOR
FM - 75kW / 915MHz

SPECIFICATION

Electrical and Technical Data

Connection data high voltage power supply

Voltage	3x 400 VAC +/-5% / 50 Hz
Power consumption	85 kVA
Current consumption	122 A
Recommended back-up fuse	160 A (NH)

Technical data magnetron head

Microwave power	75 kW
Frequency	915 MHz
Anode voltage	18,5 kV
Anode current	5 A
Heating voltage magnetron	12 VAC
Heating current	115 A

Cooling

Cooling water parameters magnetron head

Flow rate	min 90 l/min
Temperature range	20 - 25°C
Pressure	5 - 5,5 bar
Required cooling capacity	min 45 kW
Customer needs	fine filter in cooling water supply, ball valves in supply and return, pressure reducer

Cooling water parameters air water heat exchanger control cabinet

Flow rate	min 20 l/min
Temperature range	20 - 25°C
Pressure	5 - 5,5 bar
Required cooling capacity	min 10 kW
Customer needs	fine filter in cooling water supply, ball valves in supply and return, pressure reducer

Cooling water quality

PH - value	7-9
Conductivity	<300 µS/cm
Hardness	<0,1 °dH
Alkalinity (°dH)	<1 °dH
Chloride Cl content	<20 mg/l
Sulphate So4	<50 mg/l
Ammonium NH4	<1 mg/l
Iron Fe	<0.2 mg/l
Manganese	<0.1 mg/l
Organic germs	<1000 CFU/ml

:fm Fricke und Mallah Microwave Technology GmbH
Werner-Nordmeyer-Str. 25 I 31226 Peine I Germany
Tel.: +49 (0) 5171 54 57-0 I Fax: +49 (0) 5171 54 57-26
info@microwaveheating.net I www.microwaveheating.net