



# POWER SUPPLIES

## *WAVEGEN Series - Microwave Power Supplies*

### **WAVEGEN 80 75KW, 915MHz, 60Hz, 480V, 3-Phase, 12-Pulse**

The Wave Gen features proven and reliable systems and features:

- ◆ 14-Gage Stainless Steel Construction - NEMA 4X style
- ◆ Fully Adjustable Power Output of 0–75 Kilowatts
- ◆ Microwave Isolator to Prevent Reflected Power from Damaging the Magnetron Tube
- ◆ Hard-wire Monitored Safety Interlocks
- ◆ Stand-alone, Closed Loop Power Supply Cooling System
- ◆ 24 Volt Control Circuit per IEC Safety Standards
- ◆ High Voltage Lockout for Safe Maintenance Testing of Control Circuits
- ◆ Includes New Magnetron Tube Fully Tested to Operate up to 80KW
- ◆ Internal Magnetron EMI Enclosure that Contains RF Leakage to Meet Code requirements
- ◆ Internally Guarded High Voltage Transformer & Rectifier Assembly
- ◆ Allen Bradley PLC with Ethernet Communication
- ◆ Safety Relay and Dual High Voltage Contactors
- ◆ Reduced Voltage Start (Step-Start)
- ◆ Analog Sensors to Measure Forward Power, Reflected Power and Efficiency
- ◆ PLC Controlled, Electronically Driven Filament Transformer and Electromagnet Design Provides State-of-the-Art Magnetron Power Control
- ◆ Improved Water System for enhanced distribution for cooling components appropriate with supply temperatures up to 100F
- ◆ Can be optionally configured to operate in any System Control

#### **Maintenance Features**

- ◆ Check Valves Allow Changing Magnetron Tubes with Minimal Water Loss
- ◆ Temperature Sensors Mounted in Thermo-wells to Facilitate Replacement with Minimal Downtime
- ◆ Glide supported circulator allows easy and efficient exchanges
- ◆ Sloped Magnetron Enclosure provides easy access to Magnetron and Filament Transformer

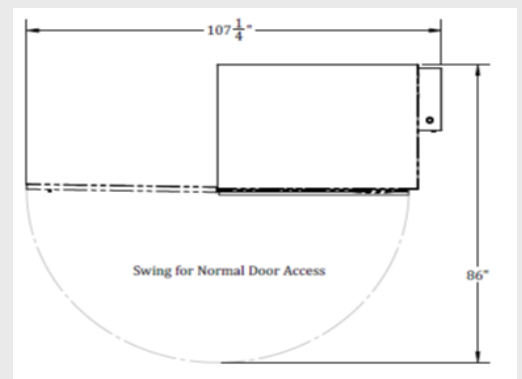
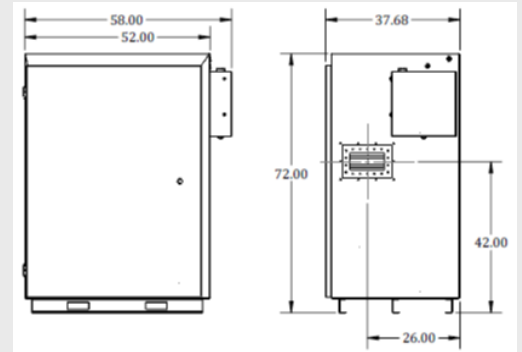
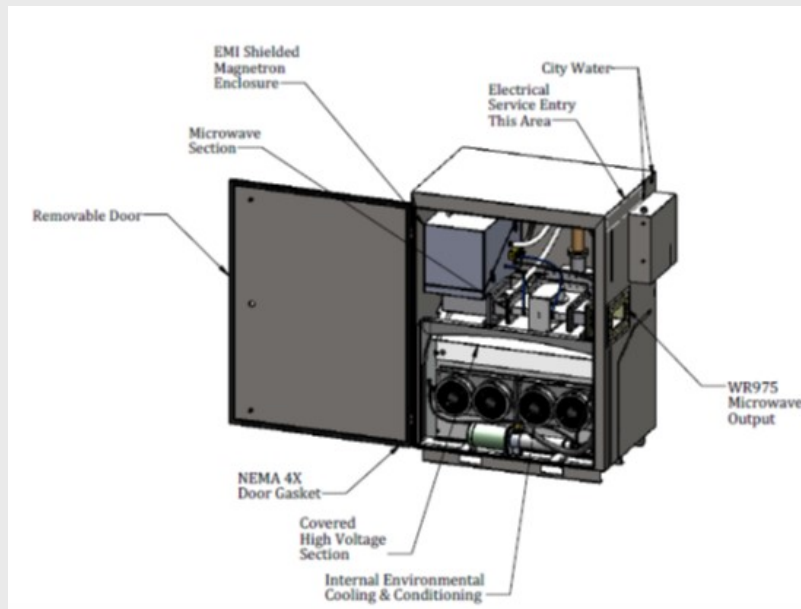
#### **Optional Equipment**

- ◆ Local Touch Screen for Interlock Annunciation and Local Control
- ◆ Analog Anode, Filament & Electromagnet Meters
- ◆ External Lockable Safety Disconnect Switch to Remove 480V Power from the Enclosure
- ◆ A Range of Options for Power Control:
  - Local Manual and Automatic Controls (Requires Optional Touch-Screen)
  - Remote Analog Signal, 4-20mA (0-10V Optional)
  - Remote Network Control (Ethernet or Serial)



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### Specifications:

- ◆ Electrical Service Requirement: 460-500 Volts, 3 Phase Input Protected by a 150 Ampere Circuit Breaker or Fuses.
- ◆ Plant Cooling Water Requirement: 20 KW (Max: 10 Gallons per Minute at 80°F)
- ◆ Ambient Environment: 20-100° F
- ◆ NEMA 4X (IP66) Environmental Protection

WaveGen 80  
Microwave Power Supply

