



magdrive1000

NEW TECHNOLOGY FOR INDUSTRIAL MAGNETRON POWER SUPPLY

The Magdrive1000 represents cutting edge technology regarding power supply for standard magnetrons.

A built in CPU circuit regulates the internal filament current circuitry and the anode power level applied to the magnetron.

The behaviour of the magnetron is checked and regulated in order to minimize moding and to ensure maximum magnetron lifetime under all load conditions.

This new technology makes Magdrive1000 the perfect choice for industrial products, for industrial installations and for microwave laboratory work.

GENERAL FEATURES

- Designed for 1kW 2450 MHz standard magnetron.
- Continuously variable output power level.
- Internal filament current circuitry.
- High efficiency.
- Low weight.
- Completely boxed with cooling fan.
- RS232 port for control and parameter setting.
- PC software included.

MAGNETRON LONGLIFE FEATURES

- Regulated filament current supply.
- Moding and arcing protection.
- Optimization for narrow bandwidth settings.

magdrive1000

ELECTRICAL PERFORMANCE

Input data

Mains voltage	230 VAC +/-10 %
Mains frequency	45-65 Hz
Power factor	>0.95 at 1300W and 230 VAC

Output data

Anode power	100-1300 W set in 10W steps. Regulated by CPU.
Anode voltage	3.8-4.3 kV (Application dependant)
Anode current	25-350 mA (Application dependant)
Filament current	4-10 A. (Parameter setting varied by application.)
Efficiency	>93% at full power

Protection

Filament circuit	Open circuit / short circuit protected
Anode circuit	Open circuit / short circuit protected.

Software/Interface

Interface	RS 232 optically isolated.
Control parameter	Power level, filament current settings, moding and temperature protection level.
Status parameters	Actual power level, alarm status, internal temperature, filament current, magnetron hours.

Accessory

Control module	Modbus RTU communication (RS485) for multi-magnetron installations. Each control module handles up to six magdrive1000.
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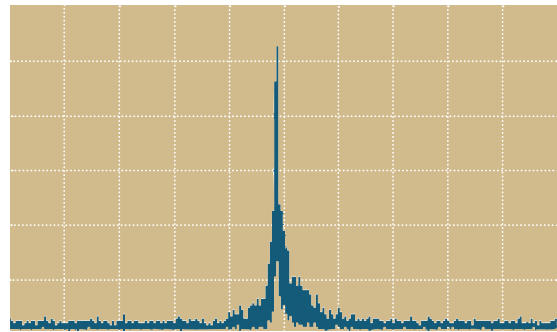
APPROVALS AND ENVIRONMENT

Safety	EN 61010
Harmonics conducted	EN 61000-3
EMC	EN 61000-6-3 Emission (Industry), EN 61000-6-2 Immunity
Recommended ambient	-25 to +50 C°
Humidity	Non condensing

NARROW SPECTRUM

Typical spectra

Center fq	2,45 GHz
Fq scale	2 MHz/div
RBW	30 kHz
Amplitude scale	10 dB/div



MECHANICAL DATA

Weight	2.4 kg
Overall dimensions	Length 260 mm Width 165 mm Height 120 mm

