



MG6K – 6kW, 2.45GHz Microwave Generator



The **MG6K, 6kWatt, 2.45GHz. Microwave Generator** is a precision unit intended for both scientific and industrial applications. The robust construction using tried and tested components together with the latest design techniques ensure a long and trouble free life particularly in harsh environments

The power supply is mounted inside a 19 inch rack enclosure and is air cooled. The magnetron and isolator are mounted inside a separate aluminium box. Both the magnetron and isolator are water cooled.

An arc detector is fitted inside the magnetron launcher

waveguide. The reflected power measurement detector is fitted inside one arm of the microwave isolator.

The main features of the generator are:

- Proven design and track record
- Individual LED displays for incident (forward) **and reflected power**.
- Precision power control +/- 1% of set power
- Arc detection system
- Isolator to prevent excessive reflected power damaging the magnetron
- Power supply can be remote from the magnetron
- 2.45GHz output frequency.
- Pulsing option available.

The output power of the generator is fully adjustable between zero and maximum power (although the magnetron manufacturer recommends that it should not be run below 1.5kW for long lengths of time). The feedback control system ensures that set output power remains constant and repeatable. Incident (forward) and reflected power measurements are internally calibrated to give high accuracy throughout the power range

An external voltage of 0 to 5Volts can be used to control the output. This is particularly useful in plasma applications where, for example, the output power may be used to control the plasma temperature.

