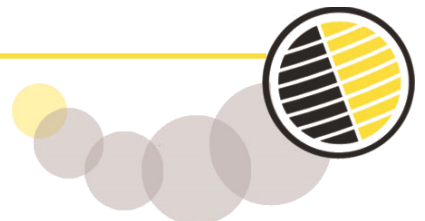




## MATCHING NETWORK GGK-AM1

In any plasma system the matching network is a critical component. The purpose of the matching unit is to transform the complex, variable impedance of the plasma load into 50 ohm resistive requested by the transmission line (coax CABLE) and the RF generator to operate efficiently. Gambetti currently produce a family of automatic and manual matching networks for HF (13.56Mhz) and have the knowledge and experience to provide customers with customized product.



## Quality and Component selection

The most critical parts in any matching network are the variable tuning elements. These are usually variable capacitors and in some case (like the model GGK\_MM2) variable inductors.

We use **hi-quality, air variable capacitors**, equipped with double wiper contact for currents up to 15 Amps RF and voltages up to 3000 Volts. Above these levels we use Comet vacuum elements.

For power levels up to 1Kwatt air capacitors are generally the best solution: they move faster, compared to vacuum models, and the match can be obtained in less than 2 seconds.

GGK-AM1 is our **standard auto matching network**.

Rugged construction, hi-reliability and inclusion of all the features to make installation, configuration and operation easy.

As the plasma impedance is normally unknown, special efforts have been made to make quick tuner configuration: **Several coil configurations are available**.

The standard coil is made by 6mm copper, silver plated tube with 4 user configurable taps.

3-4-5-6 turns available. Mounting hardware and pre-drilled holes are provided to assemble up to 3 pad fixed capacitors.

### FIELD OF USE

Production of PVD e PECVD systems

Research & Development

### FEATURES & BENEFITS

Full preset capability.

Each servo channel (magnitude and phase) can work independently in auto/hold/preset mode. **This flexibility is unique in Gambetti's Matching network.**

Fast tuning. With optimal preset less than 1 second.

DC bias reading on user interface.

All IO's optically isolated.

Digital signals 24V , analog 10V full scale.

Output connector 7/16 type.

Diagnostic LED's on front panel.

Each tuning capacitor has its own low and hi limiting potentiometr, user adjustable. **This is another unique Gambetti feature.**

