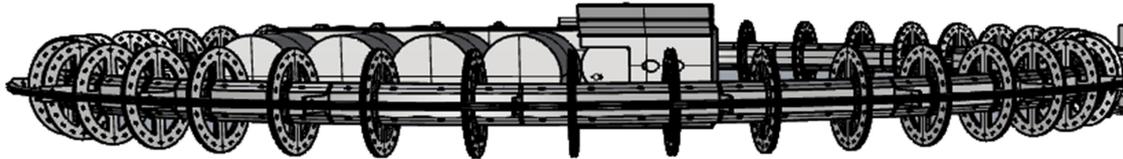


PIP08i- Miranda Thermonuclear Fusion reactor

500K-MAG is a one stage reactor designed to energize magnetically plasma to a record energy 500KeV using up to 22 Megawatts high power system used to confine and ignite high density plasma injecting the ions again the target with an efficiency over 80%

This scientific instrument is easy to upgrade and adapt to different operation modes.



Applications

This equipment is designed to reach fusion in the 100kW range at a fraction of the cost of any facility and can be used in following fields:

- High efficiency magnetic plasma heating
- Thermonuclear Fusion Physics
- High Energy
- Plasma thrusters
- 0% emissions energy generation



Previous version

Features

- Designed to reach ignition conditions that generates more energy released than injected
- 1 Stage high efficiency magnetics acceleration of Hydrogen or Deuterium ions to 500KeV
- Magnetic field confines the ions
- Ion fusion that is the latest technology
- High density fusion to increase output power
- Rated to aneutronic fusion using reactions: H-Li6, H-Be9 and H-B11
- Installation under 10kV for easy regulations
- Neutron generating reactions under installation under the responsibility of the user. Could be used to make D-D fusion by using deuterium ions hitting DLi7 as long as deuterium density in DLi7 is greater than pure deuterium solid.
- Investigators can design with their own software different discharge times to optimize operation

Includes

- 3kJoule pulse capacitor bank
- High power SCRs rated to 30kA peak

- Power injection over 27 megawatts
- Magnetic acceleration system of plasma to 500KeV
- Capacitor bank charger and discharger
- Vacuum grade reactor
- The reactor chamber walls material is non-magnetic or low magnetic with low degassing
- 2 stage pump rated to 0.25Pa
- Hydrogen/Deuterium generation and injection system
- GPIO card used to control the reactor
- Magnetic sensor
- Configuration Application of coils and main parameters
- Included wires, screws, sealing, pipes
- 1 year support

Operation

- Remote safe operation
- Safe working installation with all capacitors discharged
- User can modify coils parallel/serial configuration and parallel capacitors in order to modify test parameters

Dimensions, weigh and external supply requirements

- Body dimensions 1100x1080x140mm
- Approximate freight weight 33kg pump included
- 220V/110Vac 50/60Hz 3KW

Licencing, Terms and uses

These are PRELIMINARY SPECIFICATIONS: Drawings and specifications can be modified without notifying

It is a designing reactor oriented to experienced users to allow them mounts their device. User is responsible of maintenance, safe operation and needed certifications when assembled

Additional parts

- Fusion to electric power electromagnetic converter
- Sensors
- Oscilloscope
- Simulator and tools to design or adapt the reactor

The reactor simulator generates an output excel readable giving a 2D magnetic field map and outputs mains operational parameters.