

TPS No: 900026

Rev: 1

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**3.5kW Magnetron, Water Cooled  
(Horizontal Water Connection)**

APPROVALS			REVISIONS			
	INITIALS	DATE	REV	DESCRIPTION	DATE	APPR
Drawn	JFG	22OCT01	1	Prototype Release	22OCT01	JFG
Engineering						
Manufacturing						
Marketing						

**1.0 General Description**

This document describes a custom version to the GAE model GA8002 industrial magnetron designed specifically for use in magnetron head assemblies manufactured by MKS/ASTeX. Specifically, this magnetron is compatible with the MKS/ASTeX model AG9131A for installation in magnetron head assembly number D13449.

Two magnetron assembly configurations are available. Part number 910904 is the basic magnetron for installation into new magnetron heads. Part number 910904-1 is for field replacement and includes Swagelok water connection fittings. Magnetron replacement instructions are also provided with the 910904-1 assembly.

**2.0 Reference Documents**

940007 Technical Service Document, Magnetron Replacement Instructions

**3.0 Specifications****3.1 Electrical Characteristics:**

Magnetron Type	Water-cooled Hitachi 2M131
Output Frequency	2450 MHz +/- 30 MHz
Output Power	3.5kW maximum
Duty Cycle	Continuous
Peak Anode Voltage	-6.4 kVDC
Average Anode Current	650 mADC
Filament Voltage	Standby: 4.6 VAC Full Power: 3.2 VAC
Filament Current	19 A

**3.2 Mechanical Characteristics:**

Cooling water connections	¼" OD soft copper tubing with ¼" Swagelok® tube fittings
Cooling water flow	1.0 gpm nominal, 0.5 gpm min. @ 35 °C max. input temperature

**4.0 Ordering Information**

<u>Part Number</u>	<u>Description</u>
910904	Magnetron assembly (for installation in new generators)
910904-1	Magnetron assembly with fittings and instructions (for field replacement)

5.0 Outline Drawing

