

AMN0XVT

3KV/20A and 4.5KV/25A and 9kv-40A models

Impedance Matching Networks

AMN0XVT is an Impedance matching networks made by Vactechniche. This Automatic matching Networks, perform the impedance matching process very fast and stable.
Advanced design of this matching network makes this system usable even for very sensitive loads such as resonant loads. The seperated control-monitoring unit, mack this product easy to use.



Impedance Matching Networks are required to:

- prevent the reflection of the power transmitted by the generator,
- protect the RF generator,
- maximize the power input to the load,
- make the processes repeatable,
- Provide the necessary field intensity in the load before and after the formation of plasma.

AMN0XVT Works at three independent modes of operation:

- Automatic mode
- Manual mode
- Preset mode

Adjustable Parameters

Various parameters can be adjusted and their performance can be observed through the front panel of the controller or remotely.

Very Fast & Stable

- Approximately 2 seconds is needed to form the plasma and perform complete matching for standard loads.

Wide range of impedance matching

- 1 to 45 ohm and -200j to +30j.
- Custom design impedance matching range is possible.

Applications

- Semiconductor production.
- Physical and chemical plasma deposition.
- Plasma etching.
- Various plasma processing techniques.
- Heating and melting discarded dielectrics.

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Model	AMN03VT	AMN04VT
Input power	100-240 V , 50-60 Hz	100-240 V , 50-60 Hz
Nominal Rating input power (W)	300 W	300 W
Output frequency (MHz)	13.56	13.56
Max Output voltage	3kv	4kv
Max Output current	20A	25A
Circuit topology	L Type Network	L Type Network
Operating temperature range	10 to 40 ℃	10 to 40 ℃
Self-bias probe	Up to 2 kv	Up to 2 kv
Cooling	Air cooling	Water & Air cooling
Operation Modes	Preset, Auto, Manual	Preset, Auto, Manual
Matching speed	Less than 2 second in standard and stable loads	Less than 2 second in standard and stable loads
Dimensions (cm)	49×18×13.5 (length×width× height)	49×18×13.5 (length×width×height)
Weight	Less than 6 kg	Less than 6 kg
Input-output connector	N-N type, female connector	N-7/16 type, female connector
Case material	Aluminum	Aluminum

Automatic matching controller	
Connector of matching network control	VGA
Monitoring and outputs	It displays instantaneous position of capacitor in the device panel and device will be automatically deactivated if the capacitors reach to the beginning or the end. It has an analog output specifying the phase and amplitude value.
On/Off switch	The device has a key in front panel of control box
Mode select key And status LED	The controller has a key in front panel for mode selection and 4 status LEDs.
Digital Volume to adjust the location of capacitors.	The controller has two volumes to adjust the capacitances between 0 and 100%.
Remote control	Standard Digital and Analog monitoring and control
Weight	1.3 kg
Dimensions (cm)	23×22×4.4 (length×width×height)
Case material	Aluminum

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