

Convertible Magnetron Sputtering Sources

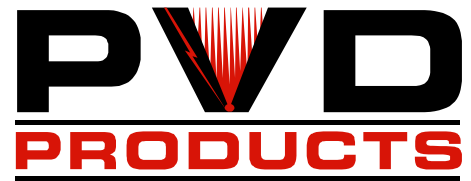


Photo of PVD Products Modular HV and UHV Convertible Titan Magnetron Sputter Sources shown with both balanced and unbalanced heads.

PVD Products offers a full line of convertible planar magnetron sputter sources for your constantly changing sputter deposition requirements. These magnetron sources are based on a proven magnetic field design providing ease of use in a small volume with excellent target utilization and deposited film uniformity. These modular sources can be provided to handle targets from one up to three inch in diameter. The sources operate with both RF and DC power supplies and are easily field configurable for balanced or unbalanced sputtering modes. Modular heads are easily interchangeable for quick target size changes.

Convertible Magnetron Source Features

- Operates with RF, pulsed DC, and DC power supplies
- Compatible with magnetic targets
- No target bonding required
- Nd-Fe-B magnets
- Magnets isolated from water
- Balanced and un-balanced modes available
- Adjustable Anode Gap
- Axial and right angle mounts available
- Operates from 0.5 mTorr to 1 Torr
- Bakeable to 200°C
- Standard 3/4" OD Shaft
- HV and UHV Versions Available
- Simple Target Changes

Standard Titan Convertible Magnetron Specifications:

Target Sizes	Heads are available to handle: 1", 2", 2.5" and 3" targets in both balanced and unbalanced modes
Overall Head Diameter	3.25" (82.5 mm) HV Version; 3.64" (92.5 mm) UVH Version
Target Thickness	0.25" maximum
Maximum DC Power	Up to 1.5 kW, Target Size and Material Dependent
Maximum RF Power	Up to 750 W, Target Size and Material Dependent
Electrical Connection	HN Connector Standard (N style available)
Cathode Voltage	200 – 1,000 Volts
Cathode Current	Up to 5 amps maximum
Operating Pressure Range	0.5 mTorr to 1 Torr
Water Flow Requirements	³/₄ GPM (3 l/min), Filtered
Water Hook Up	Supplied with ¹/₄" quick disconnects
Shaft Diameter	0.75" (19 mm) OD HV Versions
Configurations	Axial, Right Angle, or Flexible

Titan Convertible Magnetron Sputter Source Options:

Flange mounted manual or in-situ tilt assemblies, manual or motorized Z-stage, localized gas injection rings, custom flange mounts with manual or pneumatic shutter assemblies.



UHV Convertible Magnetron with various magnetic housings, a balanced 3-inch head and unbalanced 2.5" head.