

Plasma & Sputtering Sources

Rectangular Magnetrons

IONIX® rectangular magnetron sputtering sources with advanced water cooling circuits are designed for industrial production purposes, offering:

- ✓ High-rate metallic sputtering
- ✓ Pulsed reactive mode sputtering for high rate
- ✓ RF sputtering of dielectric targets
- ✓ Deposition of dielectric thin films

Advanced water cooling

Directed cooling water flow and multipolar magnet arrays accommodate the use of clamped targets at power levels of 20W/cm² (Cr, Al) and above.



Rectangular Magnetrons

Target width "A"	Target length "B"	Cathode width "C"	Cathode length "D"	Height "H"
63 mm / 2,5"	300 ... 1000 mm	102 mm	„B“ + 40 mm	64 mm
89 mm / 3,5"	300 ... 1000 mm	135 mm	„B“ + 47 mm	75 mm
100 mm / 4"	300 ... 1000 mm	147 mm	„B“ + 47 mm	66 mm
127 mm / 5"	300 ... 2000 mm	172 mm	„B“ + 47 mm	71 mm
152 mm / 6"	300 ... 2000 mm	205 mm	„B“ + 57 mm	80 mm
200 mm / 8"	300 ... 3000 mm	265 mm	„B“ + 75 mm	84 mm



Magnet Array Options

1. Standard magnet arrays

- ✓ Extended film homogeneity
- ✓ High rates
- ✓ Target utilization 30 - 35 %
- ✓ Stable operation in AC and RF mode

2. Multi-polar magnet arrays

- ✓ Target utilization 35 - 45 %

3. Coil assisted magnet arrays

- ✓ To unbalance
- ✓ Adjust target utilization

4. Low pressure magnet arrays

- ✓ $p = 7 \times 10^{-4}$ mbar and below

