

MAGIC[®] WIZARD

Drop-in Electronic Beam Steering – No System Changes Required



NOTCH



Built on Notch's proprietary metamaterial technology, MAGIC[®] WIZARD provides electronic beam steering as a drop-in replacement for standard omnidirectional antennas.

Key Capabilities

360° electronic steering | Selectable directional, multi-beam & interference-resilient patterns

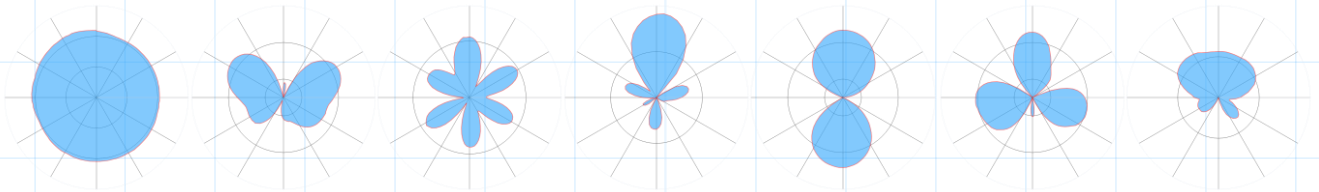


Light Weight (700g) | Low Power (600mW)



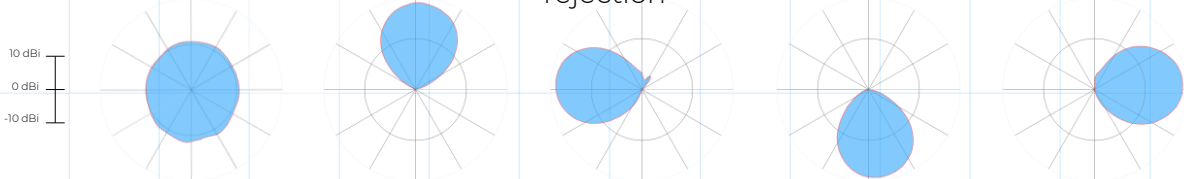
AI-Optimized Custom Radiation Patterns

Custom, use-case-specific pattern designs available on request



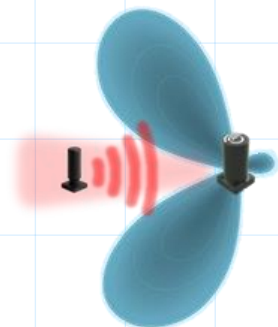
21 Selectable Angles Across 0 – 360°

AI/ML algorithms support sub-resolution steering for more precise beam shaping and interference rejection

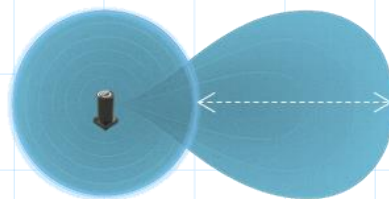


One Technology, Many Applications.

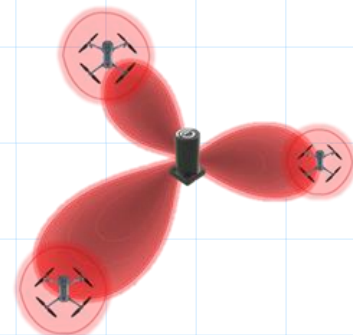
MAGIC WIZARD enables diverse use cases – from long-range resilient links to directional interference mitigation – all without any changes to your existing radio architecture



Interference Mitigation



Extend Communications Range



Multi-Beam Relay Links



Field Integration Demo

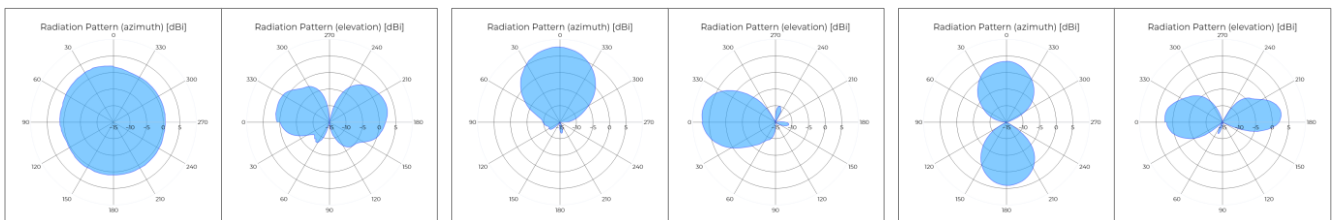


Details

Frequency Range	2100 MHz – 2600 MHz
Maximum Gain	8.7 dBi
VSWR	≤ 2.75
Polarization	Vertical
Pattern Switching Speed	Open-loop pattern switching (command \rightarrow stable state): ~ 16 ms (typ.)
Azimuth steering	21 discrete angles ($\sim 17.14^\circ$)
Height	240 mm (9.45")
Diameter	120 mm (4.72")
Weight	700 g (1.5 lbs)
Power Consumption	< 600 mW

Interfacing

Mounting	1/4 – 20 UNC female (RH); bottom-center
RF connection	Female SMA
Power	Micro-USB; POE; Custom (5~40V)
Control I/O	Micro-USB; Ethernet; XT30



Radiation pattern data for additional patterns available upon request.