

700 MHz Band Antenna - Magnum A-pattern Low-PIM/Hi-PIP 12.3 dBd Gain Model – DS7M13PDAU-Series Antennas; DS7M13PIAU- Inverted Series Antennas

Specifications	
Design Type	True Corporate Feed "A-pattern/Offset"
Frequency Range	764-805 MHz
Passive Intermod – 3 rd -order PIM	-150 dBc
Bandwidth	41 MHz
Gain	14.4 dBi / 12.3 dBd
Configuration	Single antenna
Beam Tilt (electrical downtilt)	(x) = - (0.75 degrees)
Horizontal Beamwidth (H-Plane), typ.	215°
Vertical Beamwidth (E-Plane), typ.	3.6°
Impedance	50 Oms
Null fill pattern features	Included
VSWR / Return Loss	<1.5:1 / 14 dB (min.)
Average Power Rating	600 W
Peak Instantaneous Power	25 kW
Polarization	Vertical
Lightning Protection	Direct Ground
Connector Options	7/16 DIN (F) 4.3-10 (F)
Equivalent Flat-Plate Area	6.5 sq. ft.
Lateral Wind load Thrust @100mph	277 lbf.
Rated Wind Speed	150 mph (without ice)
Total Length, antenna only Add for Mounting Kit: 1.3 ft.	19.4 feet
Radome O.D.	6.0 inches
Base O.D.	6.5 inches
Mounting design	Metal flange base see detail. (8 x 3/4" bolts)
Radome color	Horizon Blue
Weight, antenna only (approx.) With DSH-MAG1HD mount, included	98 lbs. 152 lbs.
Shipping Weight (approx.)	Consult factory
Mounting kit, included	P/N DSH-MAG1HD H.D. pipe mount kit for 4" vertical members
Invertibility	Antennas are physically invertible, but patterns are optimized for upright mounting.
Ordering Information Upright Mounting: DS7M13PDAU(x)D – 7/16 DIN Connector DS7M13PDAU(x)M – 4.3-10 Connector Invertible Mounting: DS7M13PIAU(x)D – 7/16 DIN Connector DS7M13PIAU(x)M – 4.3-10 Connector	<ol style="list-style-type: none"> 1. Replace (x) in the model number with Beam Tilt options. 2. "-" in the beam-tilt options represents 0.75° down-tilt.

Features and Benefits

- "A-pattern"/Offset horizontal coverage in a heavy-duty package maximizes performance and practically eliminates tip deflection.
- Tested to stringent Peak Instantaneous Power (PIP) levels of 25 KW using dbSpectra's multi-channel P25 PIP test bed. High PIP level is demanded by today's digital systems.
- True Corporate Feed Array – provides for excellent gain and pattern consistency across a wider frequency range.
- PIM Rated Design – better than -150 dBc.
- Excellent Lightning Protection – brass tip feeds heavy internal conductor DC ground.



Maximum Gain
Direction Indicator
for Directional
Pattern Magnums

Mounting Kit
(Included)



Radiation Pattern

Plots 5 dB/Div

Horizontal (H-Plane)

Vertical (E-Plane, -0.75°)

