

## 794-824 MHz Antenna - Magnum H-pattern Low-PIM/Hi-PIP 13.5 dBd Gain Model – DS7LM14PHU-Series Antennas

Specifications	
Design Type	True Corporate Feed "H-pattern" model
Frequency Range	794 - 824 MHz
Passive Intermod – 3 <sup>rd</sup> -order PIM	-150 dBc
Bandwidth	30 MHz
Gain	15.6 dBi / 13.5 dBd
Configuration	Single antenna
Beam Tilt (electrical downtilt)	(x) = - (0.75 degrees)
Horizontal Beamwidth (H-Plane), typ.	75° Bi-directional
Vertical Beamwidth (E-Plane), typ.	3.5°
Impedance	50 Ohms
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 DS7LM14PHU(x)D DS7LM14PHU(x)M	7/16 DIN (F) 4.3-10 (F)
Equivalent Flat-Plate Area	7.0 sq. ft.
Lateral Wind load Thrust @100mph	295 lbf.
Rated Wind Speed	125 mph (without ice)
Total Length, antenna only Add for Mounting Kit: 1.3 ft.	19 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	85 lbs. 139 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 not invertible. For invertible beam tilt options contact dbSpectra at <a href="mailto:tech@dbSpectra.com">tech@dbSpectra.com</a>
<b>Ordering Information</b> DS7LM14PHU(x)D – 7/16 DIN Connector DS7LM14PHU(x)M – 4.3-10 Connector	<ol style="list-style-type: none"> <li>1. Replace (x) in the model number with Beam Tilt options.</li> <li>2. "-" in the beam-tilt options represents 0.75° down-tilt.</li> </ol>

### Features and Benefits

- "H-pattern" Bi-directional 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

Horizontal (H-Plane)

Plots 5 dB/Div

Vertical (E-Plane, -0.75°)

