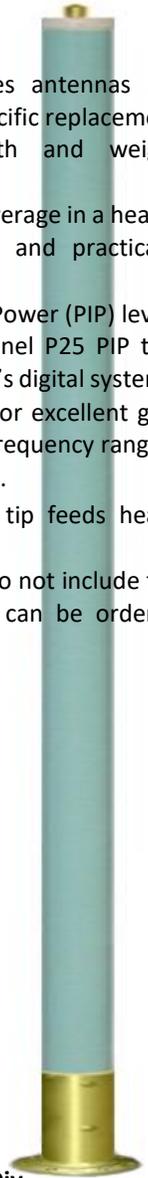


800 MHz Band Antenna – *SHORT MAGNUM*, H-pattern Low-PIM/Hi-PIP 13 dBd Model: DS8M13PSHU-series Antennas

Specifications	
Design Type	True Corporate Feed "H-pattern", with optimized materials
Frequency Range	806-869 MHz
Passive Intermod – 3 rd -order PIM	-150 dBc
Bandwidth	63 MHz
Gain	15.1 dBi / 13 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.	5°
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 DS8M13PSHU(x)D DS8M13PSHU(x)M	7/16 DIN (F) 4.3-10 (F)
Equivalent Flat-Plate Area	4.4 sq. ft.
Lateral Wind load Thrust @100mph	185 lbf.
Rated Wind Speed	175 mph (without ice)
Total Length, antenna only Add for Mounting Kit: 1.3 ft.	13 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.)	62 lbs.
Shipping Weight (approx.)	Consult factory
Mounting kit, OPTIONAL – ORDER SEPARATELY	P/N DSH-MAG1HD H.D. pipe mount kit for 4" vertical members
Invertibility	SHORT MAGNUM Antennas are not invertible. For invertible beam tilt options contact dbSpectra at tech@dbSpectra.com
Ordering Information DS8M13PSHU(x)D – 7/16 DIN Connector DS8M13PSHU(x)M – 4.3-10 Connector OPTIONAL BASE MOUNT DSH-MAG1HD KIT (54 pounds)	<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

- The dbSpectra SHORT MAGNUM-series antennas are length- and weight-reduced to meet specific replacement requirements, or used when length and weight parameters are most critical.
- "H-pattern"/bi-directional 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.
- The SHORT MAGNUM-series antennas do not include the base mount and clamp system – this can be ordered separately, if required.



Radiation Patterns

Horizontal (H-Plane)

Plots 5 dB/Div

Vertical (E-Plane, -0.75°)

