



Jampro JSHD HD Digital Side Mounted FM Antenna

The Jampro **JSHD HD** FM antenna system for full service stations provides exemplary linearity and power handling capability. The antenna is based Jampro's 30 years of experience in building dual input panel antennas for FM and TV broadcast service. Additional knowledge comes from our 50 years manufacturing experience in all types of broadcast FM and TV antennas, filters, combiners and ridged coax products.

The **Dual Input HD** antenna provides isolated and separate inputs for both analog and digital transmitters. This approach allows the digital transmitter to operate at its target power with NO power lost in a reject load and NO power reduction caused by 'lossy' digital injectors. By virtue of the Jampro 'built in the USA' power distribution system, extra reliability is built into the antenna system. **There is no single point failure that can take the antenna totally off the air.**

Because the system uses two separate and isolated RF paths, the antenna system is fully redundant. Either input could be used for analog or digital RF after considering power levels. This design approach allows for easy antenna system, coax or transmitter testing. The HD Radio / I.B.O.C. folded hybrid feed for the dipoles is mounted right behind each antenna dipole array and allows dry air pressurization from the input connectors through to the radiating dipoles in order to protect the antenna from damage causing moisture invasion.



The antenna system is tested full size at the Jampro factory. Directional Patterns are available, certified full size on our expansive testing range. By measuring the system at the same size as will be used at the station, no errors of scale can creep into the project to distort the coverage pattern. Factory measured performance can easily be obtained at the station's site.

A similar dual input style antenna with standard panel back bone serves the KSL site with 13 stations (plans to expand in the works) totaling a whopping 325 kW ERP for Salt Lake City, Utah. This antenna went on line in the fall of 2002.



Typical specifications:

Number of Bays	Dipoles Per Bay	Gain (times)	Gain (dB)	Antenna Height	Weight (lbs)	Wind load (lbs)
1	1	0.46	-3.37	Contact Factory		
2	1	.70	-1.55			
4	1	1.3	1.14			
6	1	1.9	2.78			
7	1	2.2	3.42			
8	1	2.5	3.9			
10	1	3.1	4.9			
12	1	3.6	5.56			

Notes:

1. Specifications shown are for half-wave spaced dipoles
2. Weights and wind loads shown include standard leg mounting brackets and feed lines
3. Wind loads based on 50/33 PSF (98 MHz, midband)
4. In an omni-directional configuration, circularity is ± 2 dB or better, 24" face or smaller tower
5. All inputs are EIA flange, female
6. Power derating occurs above 2,000 feet elevation. Contact factory for details
7. Power and dB gains are typical for horizontal and vertical components
8. Special mounting brackets are available
9. Other combinations of EIA inputs and power ratings available
10. Power rating is 10 kW per dipole, special high power designs available
11. Total number of FM Channels may be limited by total input power
12. Power gain is based on half wave dipole in free space

Since many factors contribute to a station's compliance with FCC exposure guidelines for radio frequency radiation, Jampro Antennas cannot accept any responsibility in this matter. The station must examine and determine its status based on each individual situation. For reduced low angle radiation near the tower, a low RFR configuration of this antenna is available. Contact the factory for pricing and further details.

All specifications subject to change without notice.