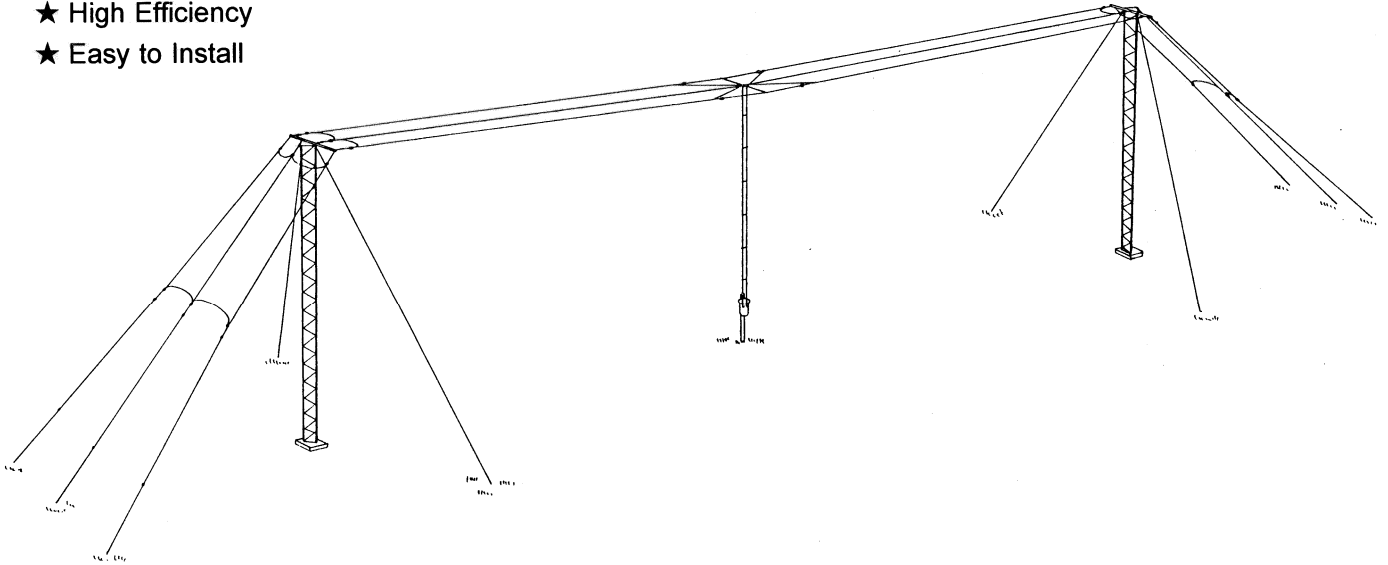


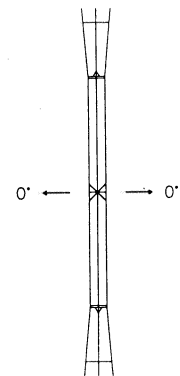


# Broadband Dipole Antenna **HD220-x**

- ★ Short Range Communications
- ★ Broadband 2 to 30 MHz
- ★ High Efficiency
- ★ Easy to Install

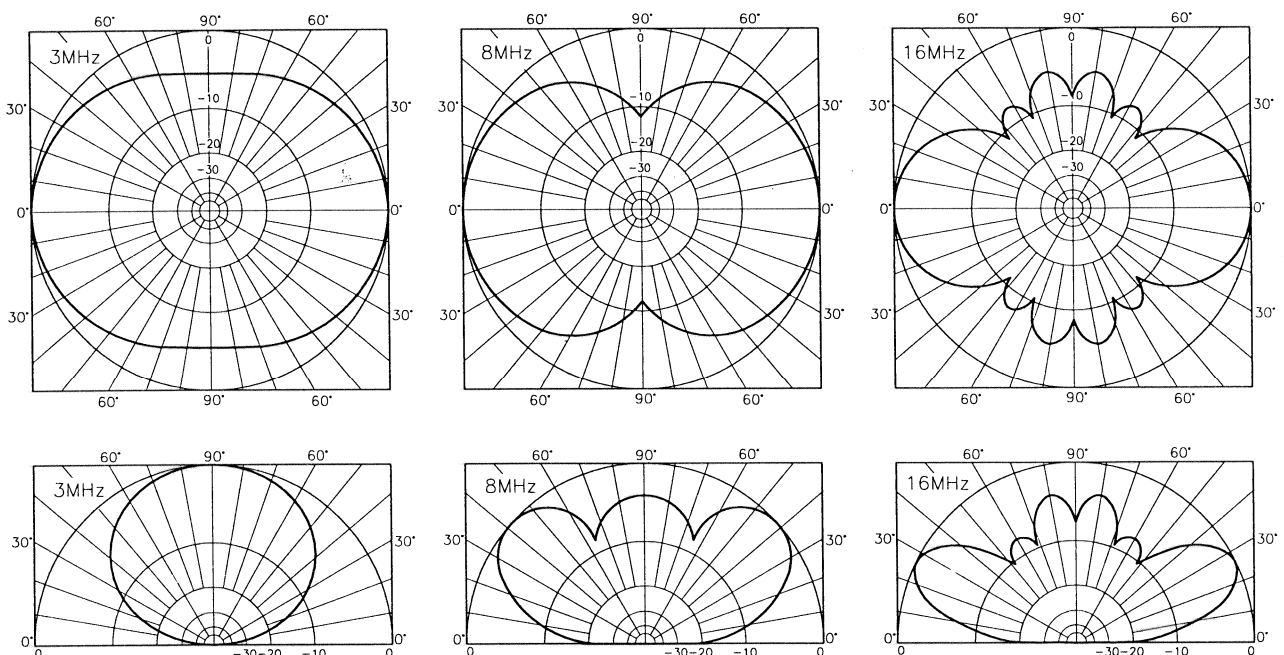


The CD model HD220 series is a broadband travelling wave dipole antenna having LCR networks in the element. The model HD220 provides a dipole pattern over a broad frequency range using a small land area. Placing the antenna close to ground directs the energy straight up at low frequencies, emphasizing short range communications. At the higher frequencies, the take-off angle is lowered, thereby emphasizing medium distance communications. The broad band characteristics and 2.5:1 maximum VSWR exhibit over the entire operating range make the model HD220 an ideal replacement in the situations with which several antennas have been previously required. Structurally, the antenna is supported by supplying with galvanized steel towers with all the necessary hardwares for installation as well as with balun transformer, thereby decreasing installation costs, maintenance costs, and the required land area. Furthermore it is able to install the CD model HD220 series without any concrete, if the optional concrete less foundation kit is being used.



ANTENNA PLAN

Elevation and Azimuth Patterns (Azimuth Pattern at Elevation Angle of Beam Maximum)



**SPECIFICATION SUMMARY**

Model No.	HD220-1	HD220-2
Frequency Range	2~30 MHz	3~30 MHz
Polarization	Horizontal	Horizontal
Gain	2~4 dBi	2~4 dBi
Input Impedance	50 ohms	50 ohms
VSWR. Average	2.0:1	2.0:1
Maximum	2.5:1	2.5:1
Radiation Pattern	Bidirectional	Bidirectional
Power Handling Capability	- Refer to Note Below -	
Tower Height	15 m	12.5 m
Site Dimensions, Guy to Guy	16 m x 58 m	12 m x 40 m
Tower Span	30 m	21 m
Wind Loading Capability (No Ice)	45 m/s	45 m/s
System Net Weight	480 kg	390 kg

Note: 1) Use an appropriate sub-model number when specifying or ordering a system.

Power	Connector
HD220-x-1. Receive or 200W PEP Transmit	Type -N- Female
HD220-x-2. Transmit, 1 kW Ave./2 kW PEP	Type -N- Female
HD220-x-3. Transmit, 2.5 kW Ave./5 kW PEP	Type 7/8" EIA. Female
HD220-x-4. Transmit, 5 kW Ave./10 kW PEP	Type 1-5/8" EIA. Female

2) Use "A" at the end of sub-model number when specifying or ordering the optional concrete less foundation kit.

**Model HD220-1, VSWR DATA**

