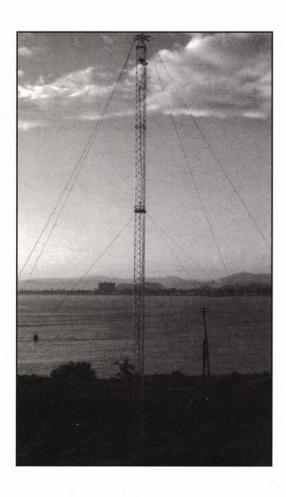
SPQ-230/330

- HF FOUR ARM SPIRAL
- **SHORT AND MEDIUM RANGE**
- **SMALL INSTALLATION AREA**



Applications

The SPQ-230/330 HF spiral antennas are designed for installations where space is at a premium and the communication requirement is for operation on several circuits simultaneously. The antennas are four arm spirals that are fed with a four port hybrid designed specifically to provide two short range and two medium range patterns simultaneously. The relatively small installation area and multifunctional operational capability makes these antennas ideally suited for congested antenna fields or sites where space is severely limited. The antenna is protected under US Patent 5189434.

Features

The SPQ-230/330 operates as four (4) separate antennas integrated into one structure. All inputs are isolated from each other permitting full duplex operation on two separate circuits and a medium range skywave circuit simultaneously or three half duplex and one receive only circuit. The spiral is a four arm equiangular design that is wound on a pyramidal structure formed by a central tower and four catenaries. The catenaries are dielectric with prepositioned element attachment clamps. The elements are constructed from jacketed cables that provide protection from the environment. The elements are terminated in resistive loads. The tower is a bolted aluminum structure.



PECIFICATIONS		PORT 1	PORT 2	PORT 3	PORT 4
		Short	Medium	Medium	Short
		Range	Range	Range	Range
		NVIS	Low Angle	Low Angle	NVIS
	Polarization	Elliptical	Vertical	Horizontal	Elliptical
	Frequency, MHz	2-30	2-30	2-30	2-30
	Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms
	VSWR	2:1	4:1	2:1	2:1
	Directive Gain, dB	7	7	7	7
	Power, KW	1	1	1	1
	Input Connector	Type "N"	Type "N"	Type "N"	Type "N"
	Azimuth Pattern	Omni	Omni	Omni	Omni
	Isolation Between Ports	25 dB			
	Dimensions (H x L x W)				
	SPQ-230	160' x 155' x 155'			
	SPQ-330	103' x 100' x 1	103' x 100' x 100'		
	Wind	100 mph, no id	ce		
	Temperature	-60°F to +160°	°F		
	Humidity	100%			
	Elevation	Sea level to 12	2,000 ft		
	Sand and Dust	MIL-STD-810	Method 510.2 Pro II		
	Salt Fog	MIL-STD-810 Method 509.2			
	Fungus	MIL-STD-454k	Regt 4		
	Rain	4 in/hr, 40 mph			
1	Lightning	MIL-E-4158E			
	Corrosion Protection	MIL-STD-454k	(