



S BAND STACKED HORN, SECTOR ANTENNA

10-29-03



OPTIONAL PORTABLE UNIT FAIR GROUNDS, CHECKPOINTS, ETC.



ANTENNA SPECIFICATIONS

MODEL NUMBER	SBND4STK
FREQUENCY RANGE	2400-2500 MHz
GAIN OVER ISOTROPIC	9 dBi PER QUADRANT
VSWR	1.4: MAX
POLARIZATION	VERTICAL, HORIZONTAL AND CP OPTIONAL
E PLANE BEAMWIDTH	16 DEGREES VERT., 18 DEGREES HORIZ.
H PLANE BEAMWIDTH	82 DEGREES, (VERT. OR HORIZ. POL).
DOWN TILT	NOT REQUIRED
POWER HANDLING	100 WATTS PER SECTOR.
IMPEDANCE	50 OHMS NOMINAL
CONNECTOR	SMA FEMALE, OTHERS OPTIONAL
SIZE	ROUND, 24" HIGH, 12" DIA.
WEIGHT	20 LB.
WIND AREA	1.35 SQ. FT.
WIND SPEED SURVIVAL	125 MPH
TEMPERATURE	-40f TO +160F
HUMIDITY	100 % (RADOME)
RADOME COLOR	LIGHT BLUE, OTHERS OPTIONAL
WARRANTY	1 YEAR

ADDITIONAL DETAILS:

This is a very versatile **Patent Pending** antenna system. When combined with the **LIGHTNING WIRELESS** multi channel **ACCESS POINT** system, a **VIRTUAL** omnidirectional system is created that is greatly superior to other standard omni systems. Each quadrant has its own channel so overloading is never a problem. Performance is increased four fold using this unique technique. When used with the M² mobile 5 dBi omni vertical SB8SV, a range of 1.5 miles radius at 2.2 mbps or greater can be achieved. This system is normally provided with low noise figure, bi-directional amplifiers, mounted in the antenna housing. Low loss coax cable is also provided in the package. The housing shown at the base of the tower can house up to 6 channels in the 802.11B band, one for each of 4 possible sectors and two for optional wireless back haul needs. Optional highly directional point to point antennas can be mounted just below the sector antenna system. The 37 foot manual crank-up mast, the NON PENETRATING, steel base for the mast are standard options normally provided as the "TOTAL SOLUTION". The base is meant for roof mounting and is normally 10 feet square. It is weighted evenly with approximately 600 lbs of cement blocks or UV stabilized, polyethylene water tanks. The complete system including the mast and the antenna, weighs about 800 lb. It is self supporting at full height (40 feet for the antenna) up to 50 mph. The system is normally guyed with 1/8" steel cable and is rated conservatively at 85 mph and survival speeds of up to 100 mph. A 6.5 foot square base is used with the portable unit and again is rated to 50 mph un-guyed and 85 mph when guyed (ref TIA/EIA-222). All parts of this system weigh under 70 lb. individually, making roof or ground installations easy for a two man crew with no added equipment required.

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