

The **HRP series** helical antennas and the **CPA series** circularly polarized antenna arrays are ideally suited when gain, pattern, impedance and bandwidth requirements are critical. Right and left hand helices provide an efficient means of discriminating between adjacently operated repeater systems. Discrimination by as much as 20 dB between RHCP and LHCP waves is achievable using helices.

The **CPA-811/A** high gain antenna array comprises of four **HRP-811/A** helices. Optimum parameters are chosen to assure the best possible patterns not only from each helical element, but from the overall array as well. The array is quickly assembled requiring a minimal set of tools.

The **HRP-232/A** is a medium gain antenna for ground-based or shipboard SATCOM applications. This antenna can be adjusted manually over 360 degrees in azimuth and 90 degrees in elevation with an optional adjustable mount.



HRP-232/A

SPECIFICATIONS

	HRP-232/A	CPA-811/A	HRP-811/A	HRP-4455/A	HRP-900/A
FREQ. (MHz)	240 - 325	800 - 1100	800 - 1100	4300-5900	890-910
GAIN (dBic)	10	17	11.5	12	3
VSWR	1.5:1 Typ.	2.0:1 Max.	2.0:1 Max.	1.35:1 Typ.	1.5:1 Typ.
POWER (WATTS)	200	500	200	100	50
FRONT TO BACK	15 dB	15 dB	15 dB	15 dB	12 dB
CONNECTOR	N female	N female	N female	N female	SMA female
WEIGHT* (LBS/KG)	30 / 14	20 / 19	10 / 4.5	1 / .45	0.8 / .36
LENGTH	60"	24"	24"	4.5"	3.5"
DIAMETER	16"	4.5"	4.5"	2"	3.5"
BASE SIZE	40" dia.	24" x 24"	13" dia.	3" dia.	6" x 6"
WIND	80 mph w/ 1" radial ice	80 mph w/ 1" radial ice	80 mph w/ 1" radial ice	80 mph w/ 1" radial ice	25 mph
RADOME	Optional	Optional	Optional	Yes	Optional

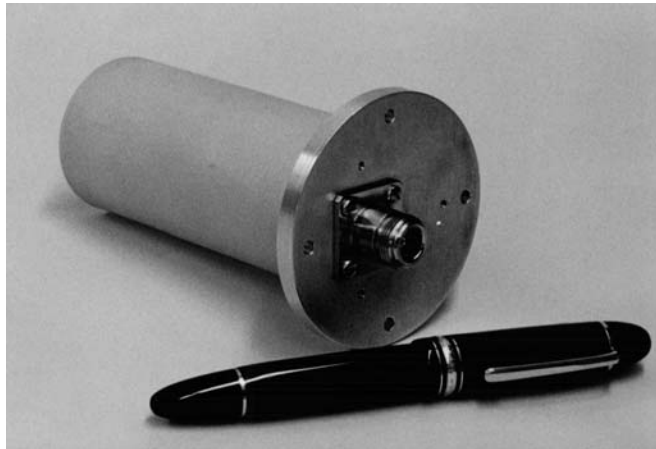
* Antenna and Ground Plane

ALL HELICALS: INPUT IMPEDANCE: 50 OHMS

POLARIZATION: CIRCULAR

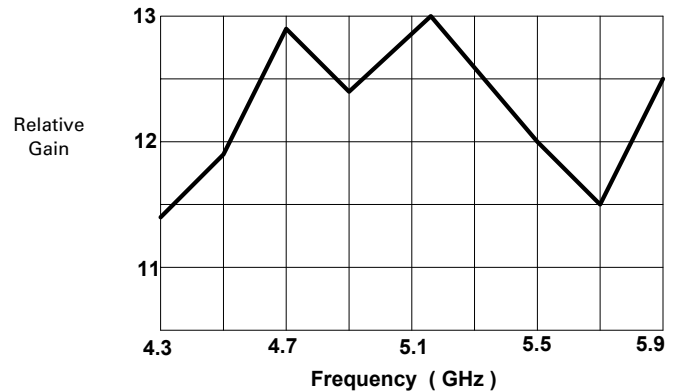
OPTIONS: 1) RADOME
2) TYPE N-MALE CONNECTOR

3) HEAVY BASE
4) ADJUSTABLE MOUNT



HRP-4455/A

HRP-4455/A - GAIN VS. FREQUENCY



SATCOM ANTENNAS

HAS series quad helix antennas are ideal when significant power coverage is required out to the horizon as in GPS and other SATCOM applications.

	HAS-2432	HAS-150*	HAS-400*	HAS-1575
FREQ. (MHZ)	240-270, 290-320	149.5	400.5	1575
GAIN (DBIC)	2 Typical	3.5	4.0	5 at 0° 0 at 90° -2 at 100°
VSWR	< 2.5 : 1	1.5 : 1 typical	1.5 : 1 Typical	1.5 : 1
POWER (WATTS)	100w	350	250	20
FRONT TO BACK	10 dB	15 dB	15 dB	20 dB
CONNECTOR	SMA	TNC Female	TNC Female	SMA
WEIGHT* (LBS)	15	12	3	2 oz
LENGTH/HEIGHT	17"	39 "	13.5"	1.25"
DIAMETER	5.25"	8 "	4.5"	3"
WIND	80 mph	80 mph	80 mph	80 mph
RADOME	yes	yes	yes	yes

Input Impedance: 50 ohms
Polarization: RHCP Standard

**See Tactical SATCOM
Antennas on Page 100 and GPS
Antennas on Page 86**

* The **HAS 150** and **HAS 400** can be ordered as a **HAS 1540** combined quadriflier helical antenna with an amplifier.