

GPS AND NAVSTAR

For hemispherical coverage, **GPS**, and NAVSTAR applications, Antenna Research offers the **PAS series** microstrip patch antennas and the **HAS series** Helical antennas. **GPS** antennas can be utilized with or without a conductive mounting surface. **NAVSTAR** and **GPS** antennas are available at L1 and L2 frequencies. A special feed design, for **PAS series GPS** antennas, makes them ideally suited for rugged military and commercial applications. All antennas are designed to maintain stable electrical performance when subjected to temperature humidity, rain, wind and ice. Several **PAS** and **HAS** antennas meet or exceed environmental conditions specified in MIL-E-5400 for use with military systems or ARINC743 for use on commercial and business aircrafts.

While microstrip patch antennas are low profile and lightweight, **HAS series** antennas are ideal when full hemispherical coverage (including the coverage at the horizon) is critical. RHCP is standard for these antennas.



PAS-1575

SPECIFICATIONS:

GLOBAL POSITIONING SYSTEM (GPS) ANTENNAS

	PAS-1575	PAS-1575/DL	PAS-1227	PAS-1227/DL	HAS-1575
FREQUENCY (MHZ)	1575.4 (L1)	1575	1227.6 (L2)	1227	1575.4 (L1)
BANDWIDTH (MHZ)	30	30	25	30	30
GAIN	5 dBic at Zenith (0°) 0 dBic 75° -2 dBic, 75 - 85°	5 dBil at Zenith (0°) 0 dBic 75° -2 dBic, 75 - 85°	5 dBic at Zenith(0°) 0 dBic 75° -2 dBic, 75 - 85°	5 dBil at Zenith (0°) 0 dBil 75° -2 dBil, 75 - 85°	5 dBic at 0° 0 dBic 90° -2 dBic, 100°
VSWR	1.5 : 1	1.5 : 1	1.5 : 1	1.5 : 1	1.5 : 1
POLARIZATION	RHCP*	Dual Linear	RHCP*	Dual Linear	RHCP*
TYPE	Patch	Patch	Patch	Patch	Helical
SIZE (DIA. x H)	5" x 0.5"	5" x 0.5"	5" x 0.5"	5" x 0.5"	1.25" x 3"
AXIAL RATIO AT ZENITH	<3 dB	N/A	<3 dB	N/A	2 dB
CONNECTOR	SMA	SMA	SMA	SMA	SMA
PATTERN: AZIMUTH	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
ELEVATION	Hemispherical	Hemispherical	Hemispherical	Hemispherical	Hemispherical

* Left Hand circular polarization optional

PAS-1575/DL, RADIATION PATTERN FOR E & H PLANES

