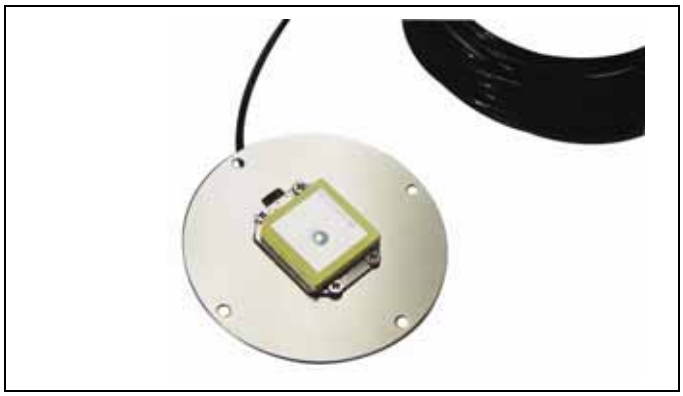
Active-32 with 3 Inch flange Innovative New Design GPS Antenna

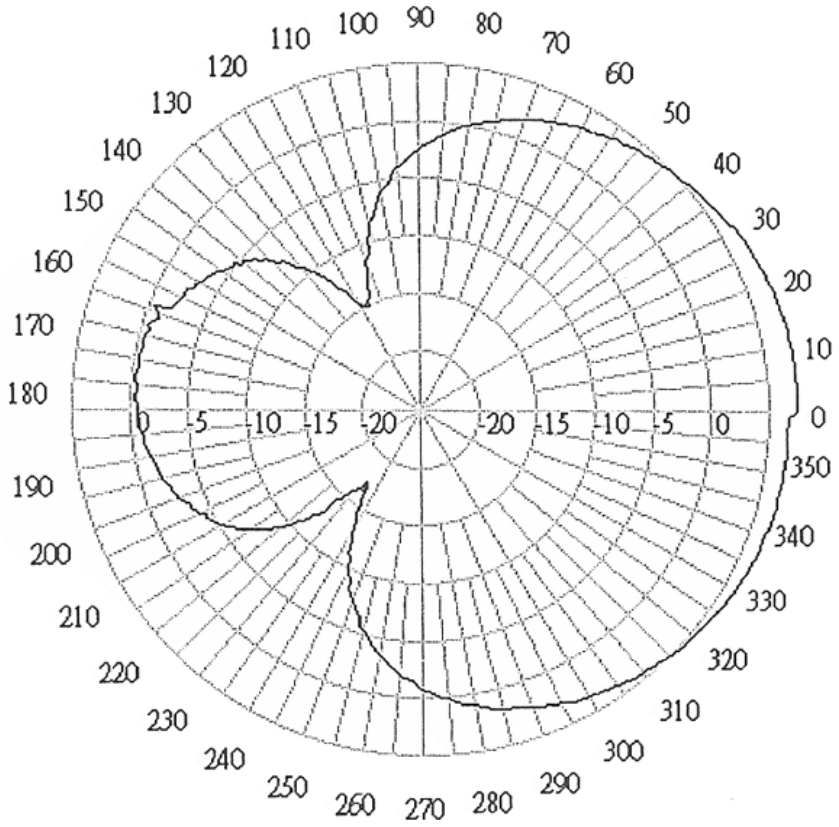


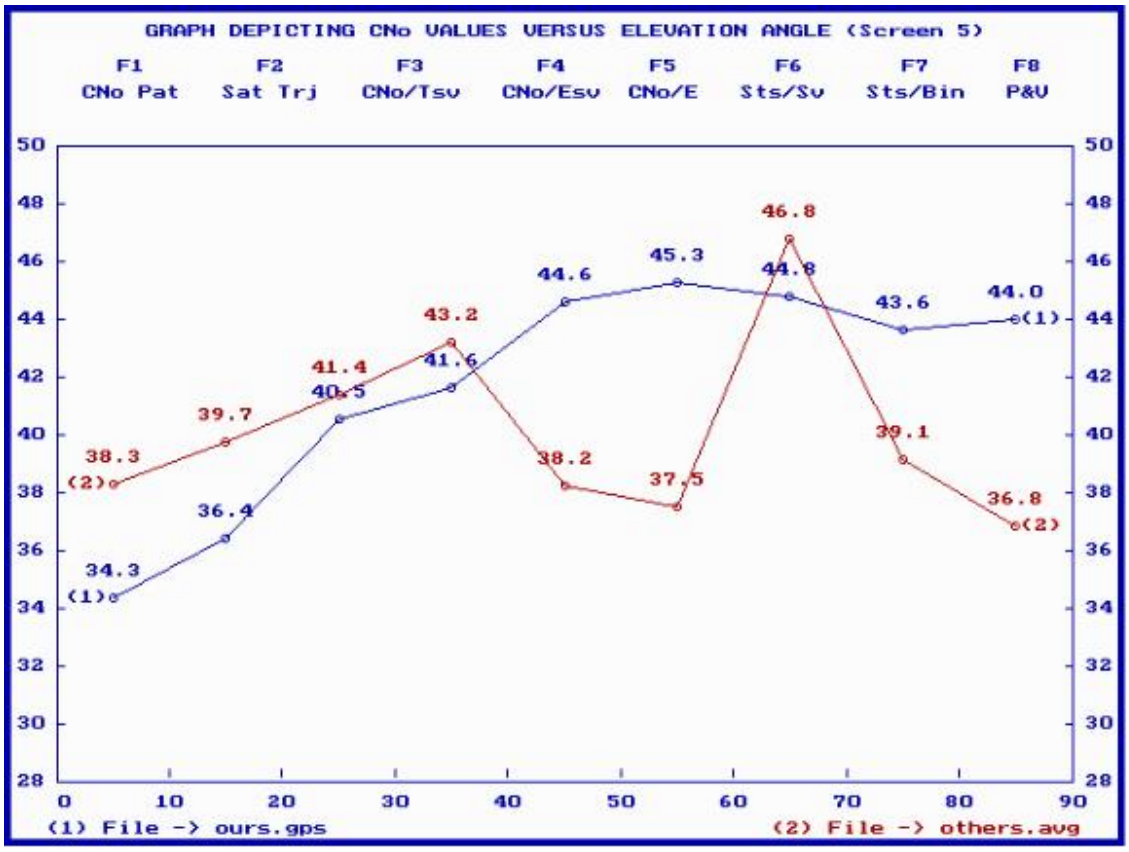
Active-32 GPS antenna is the only innovating design antenna with performance, quality and a Power protection circuit built-in to protect the active LNA's, and most importantly the host GPS receiver down the connector end from the danger of a SHORT circuit external antenna (Note: GPS receiver front-end can be destroyed or de-graded by an external GPS antenna in an over-load or short conditions. The **Active-32** is a low profile GPS active antenna system for the next generation multi-purpose GPS mobile antenna products for Telematics, Fleet Management, Navigations and AVL applications. This small print size of the antenna design does not reflect over-all performance, since the antenna itself needs no ground plane aid to deliver the L1 band small signal carrier that originates from the 24 orbiting USA satellites located thousands of miles over-head and with the ground reception power sensitivity at over -130dB. The **Stingray-**1antenna is also design as a standard power input voltages in range from +2.5Vdc to +12Vdc with reverse polarity shutdown, over-current sense shutdown and an EMC power line suppression. The most important over-all design concept of the **Active-32** active antenna is the complete protections of the host sensitive GPS receiver made from any manufacturer that it serve and can also be destroy or de-grade using an improper design antenna.

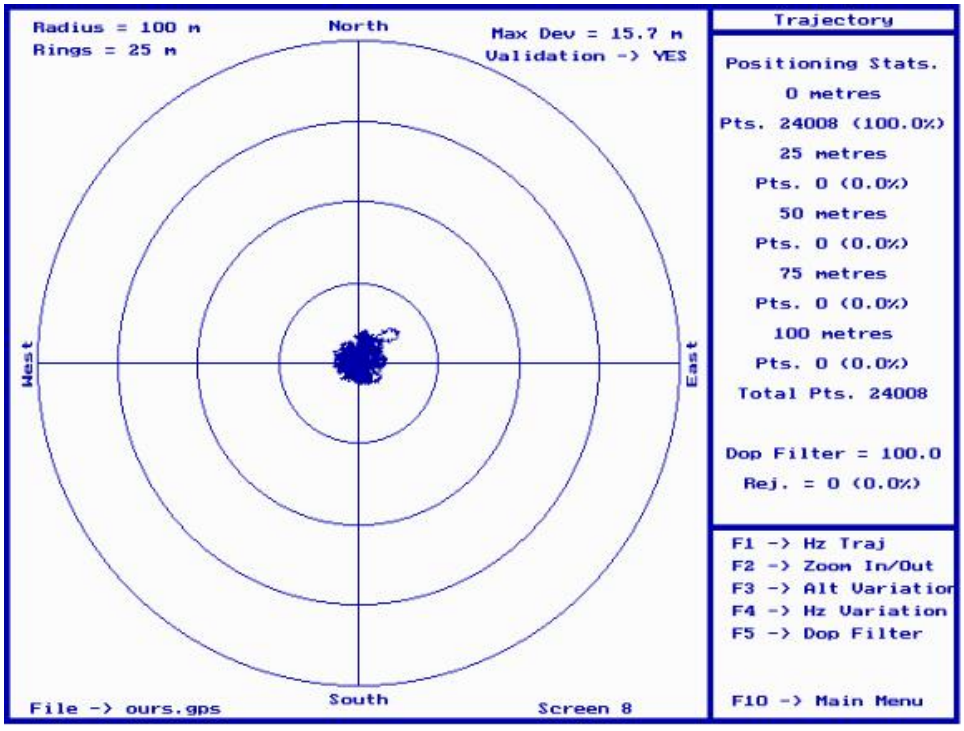
Active-32 Antenna Specifications

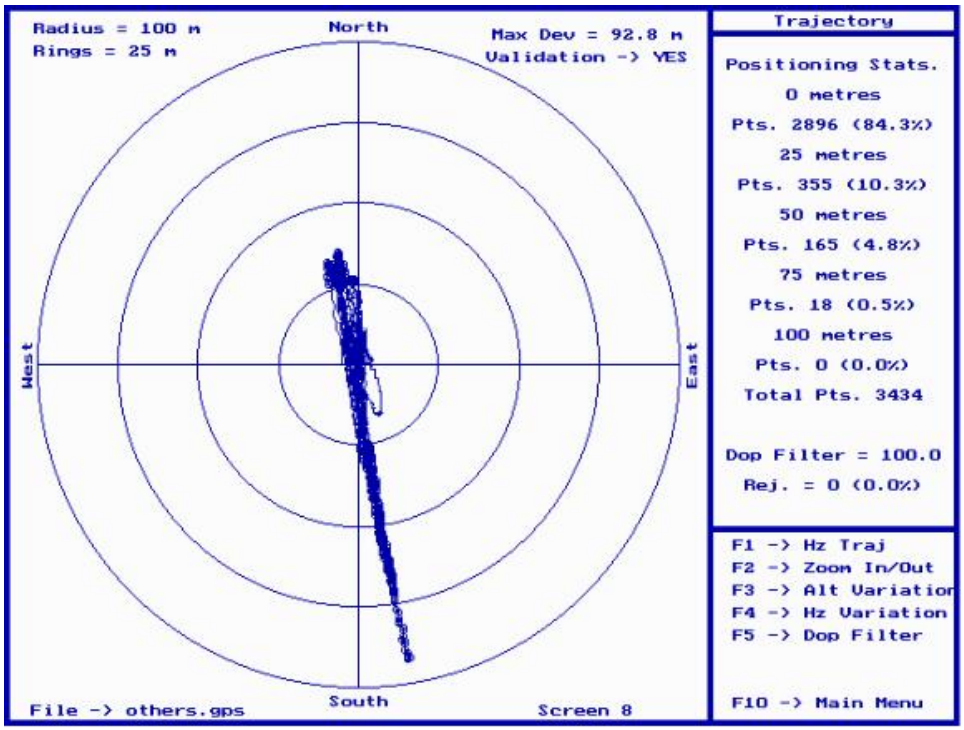
General		2 Stages active LNA
		Dual Filters, (HPF & LPF(lump element))
		+28dB gain
	Architecture Design	Dielectric Patch antenna
		Low Noise Low drop-out, Linear Regulator
		GPS receiver short circuit protect
		Low Loss RG/174 Coax cable
		Aluminum Base/ PC+ Radome Plastic
Performance	Receiving Frequency	L1 Band(1575MHz)
	Output Impedance	50 ohms
	Polarization's	Right Hand Circular (RHC)
	Bandwidth	10dB Mhz @ -3dB point
	VSWR	1.5 Typical @ 1575MHz
	Elev. Angle Coverage	5~90 degree
	Az. Bearing Coverage	360 degree
	Filterin	Dual(BPF <10 Mhz B/W, LPF @1576 MHz Stop-band @ 1585MHz)
	Over-all Gain	28dB (typical including 4dB cable loss & Filters)
	Over-all NF	<1.8dB @fo, 2dB max.
	LNA Characteristic	K=>1 Un-conditionally Stable
	RF Insertions loss	0.1dB, leakage power 100mW /1 watt input
	Power Consumption	11mA to 13mA (max)
	Power Input Sensor	Reverse Polarity Short Circuit shutdown
	Over-Current Sensor	Thermal Over-current shutdown >+150degreeC
Electrical	Power Input	+2.75Vdc to + 12Vdc input, Auto Switching
Physical	Dimensions	31 x 24.5 x 7mm +/-0.5mm
	Mount	Screw mount
	Coax Connector	BNC, SMA, SMB, MCX, MMCX, GT-5
	Coax Cable	RG-174U double shielded 5m, Low Loss 0.7dB/m
Environmental	Operating emperature	-30 to + 85 degreeC
	Storage	-40 to + 90 degreeC
		Open Frame with 3" Flanges & RF shield

STR-3 antenna RHCP response / ANTENNA RADIATION PATTERN TEST




GRAPH DEPICTING CNo VALUES VERSUS ELEVATION ANGLE (Screen 5)
F1 CNo Pat
F2 Sat Trj
F3 CNo/Tsv
F4 CNo/Esv
F5 CNo/E
F6 Sts/Sv
F7 Sts/Bin
F8 P&V
(1) File -> ours.gps
(2) File -> others.avg


Radius = 100 m
Rings = 25 m
North
Max Dev = 15.7 m
Validation -> YES
West
East
South
File -> ours.gps
Screen 8
Trajectory
Positioning Stats.
0 metres
Pts. 24008 (100.0%)
25 metres
Pts. 0 (0.0%)
50 metres
Pts. 0 (0.0%)
75 metres
Pts. 0 (0.0%)
100 metres
Pts. 0 (0.0%)
Total Pts. 24008
Dop Filter = 100.0
Rej. = 0 (0.0%)
F1 -> Hz Traj
F2 -> Zoom In/Out
F3 -> Alt Variation
F4 -> Hz Variation
F5 -> Dop Filter
F10 -> Main Menu


Radius = 100 m
Rings = 25 m
North
Max Dev = 92.8 m
Validation -> YES
West
East
South
File -> others.gps
Screen 8
Trajectory
Positioning Stats.
0 metres
Pts. 2896 (84.3%)
25 metres
Pts. 355 (10.3%)
50 metres
Pts. 165 (4.8%)
75 metres
Pts. 18 (0.5%)
100 metres
Pts. 0 (0.0%)
Total Pts. 3434
Dop Filter = 100.0
Rej. = 0 (0.0%)
F1 -> Hz Traj
F2 -> Zoom In/Out
F3 -> Alt Variation
F4 -> Hz Variation
F5 -> Dop Filter
F10 -> Main Menu