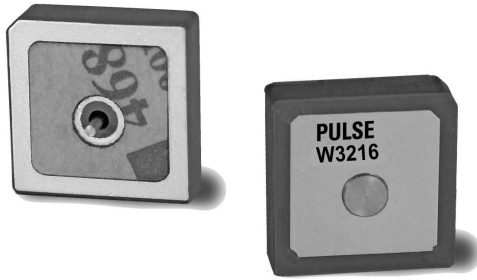
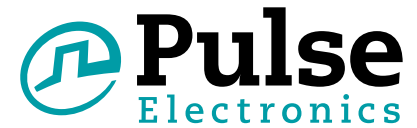


# GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216



Pulse is pleased to announce the W3216 GPS and GLONASS patch antenna to compliment our growing range of tracking antenna products. This small 0.5 x 0.5 inch (13 x 13 mm) ceramic patch antenna is .2 inches (5 mm) high and has a pinthrough mount. The underside of the antenna has double-sided tape for adhesion to the customer board.

Operating at 1.575 GHz, (L1 GPS band) and 1.598-1.606 GHz (GLONASS), the W3216 patch provides circularly polarized radiation patterns to connect to satellite systems. Reported performance is based on a ground plane of 2 x 2 inches (50 x 50 mm) delivering a gain of -2 dBi at Zenith. Increasing the size of the ground plane can significantly boost the actual application gain. Contact Pulse for applications support to get the best performance from your Navigation system.

### Features

- 1.575 and 1.598-1.609 GHz
- GPS L1 Band and GLONASS
- 0.5 x 0.5 inch (13 x 13 mm) Patch
- RoHS Compliant Product

### Applications

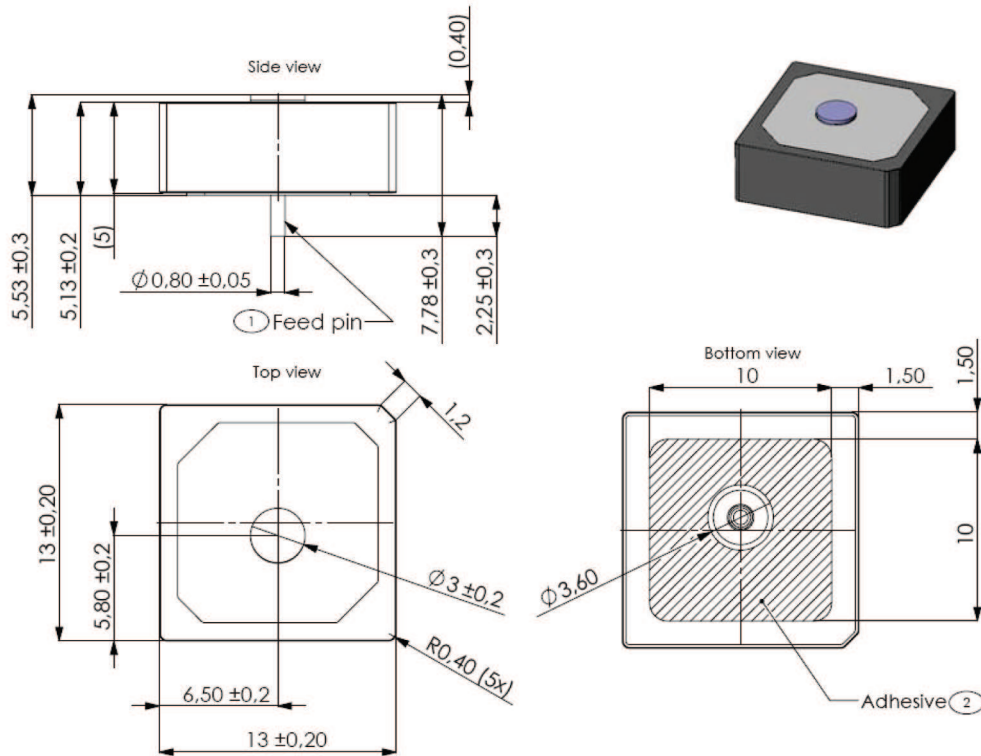
- Vehicle navigation and location
- Personal handheld tracking systems
- Health care and medical devices
- Small portable tracking equipment

## Electrical Specifications

Frequency 1 [GHz]		1.575
Frequency 2 [GHz]		1.598 - 1.606
Nominal Impedance [ $\Omega$ ]		50
VSWR	Frequency 1	1.4
	Frequency 2	2.3
Gain	Frequency 1 [dBi avg]	-2
	Frequency 2 [dBi avg]	-2
Efficiency	Vertical Plane [Freq 1]	60%
	Vertical Plane [Freq 2]	60%
Polarization		RHCP

# GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216



No.	Item	Description
1	Feed Pin	Silver plated brass
2	Adhesive	0.13 mm thick double sided tape

**Notes:**

Feed pin manual soldering conditions:

- 300° C max soldering iron temperature, 5 seconds max
- Typical lead free solders are applicable

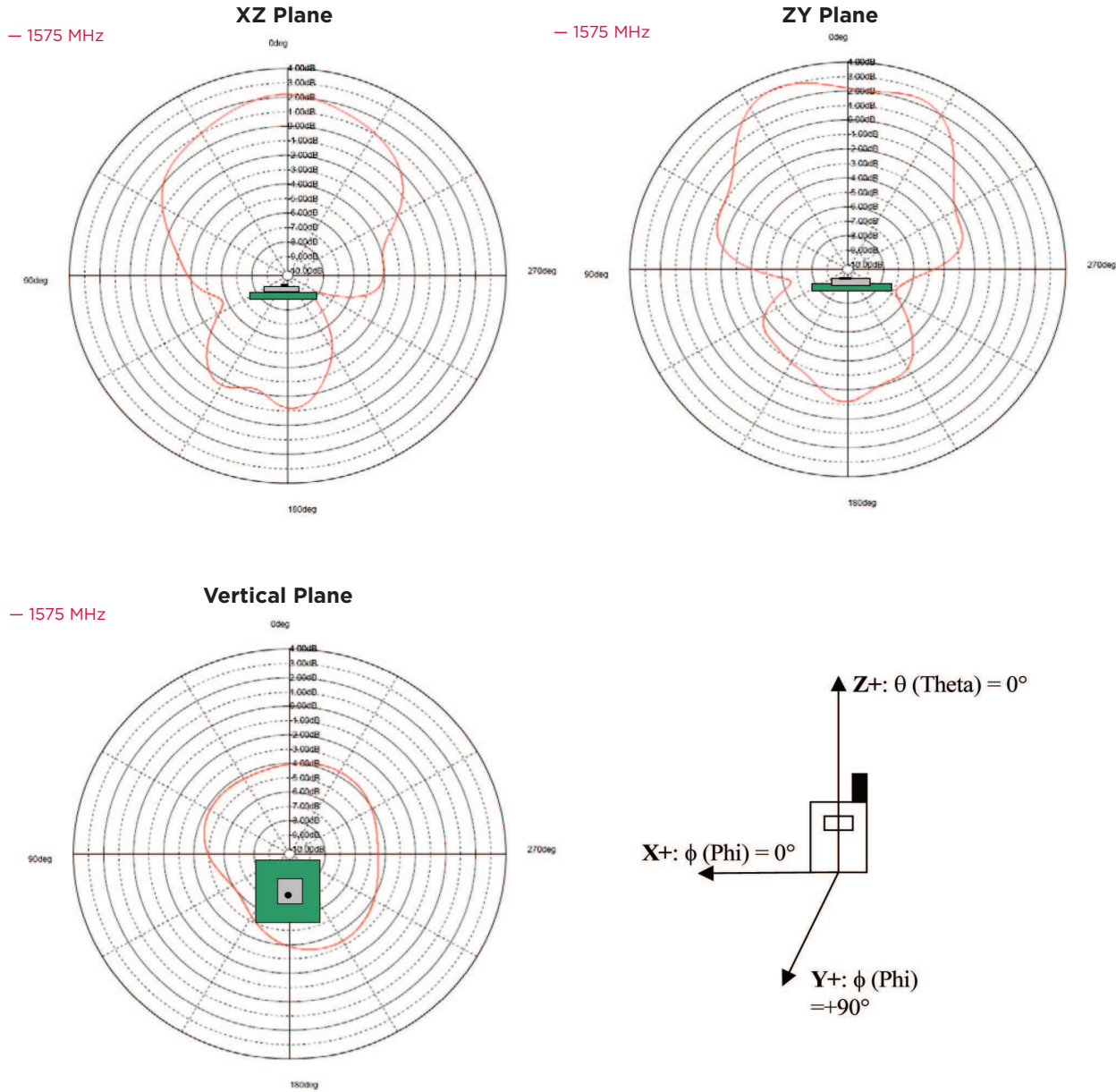
Electrode silver metallization may tarnish if antenna is stored/used in corrosive environment, especially where chloride, sulphur or sulfide, alkali or acid salts exist in the air. Corrosive gases may cause oxidation of electrodes and reduce solderability.

# GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216

## GPS Band Radiation Patterns

Typical Free Space Radiation Patterns - Measured on 50 x 50 mm ground plane

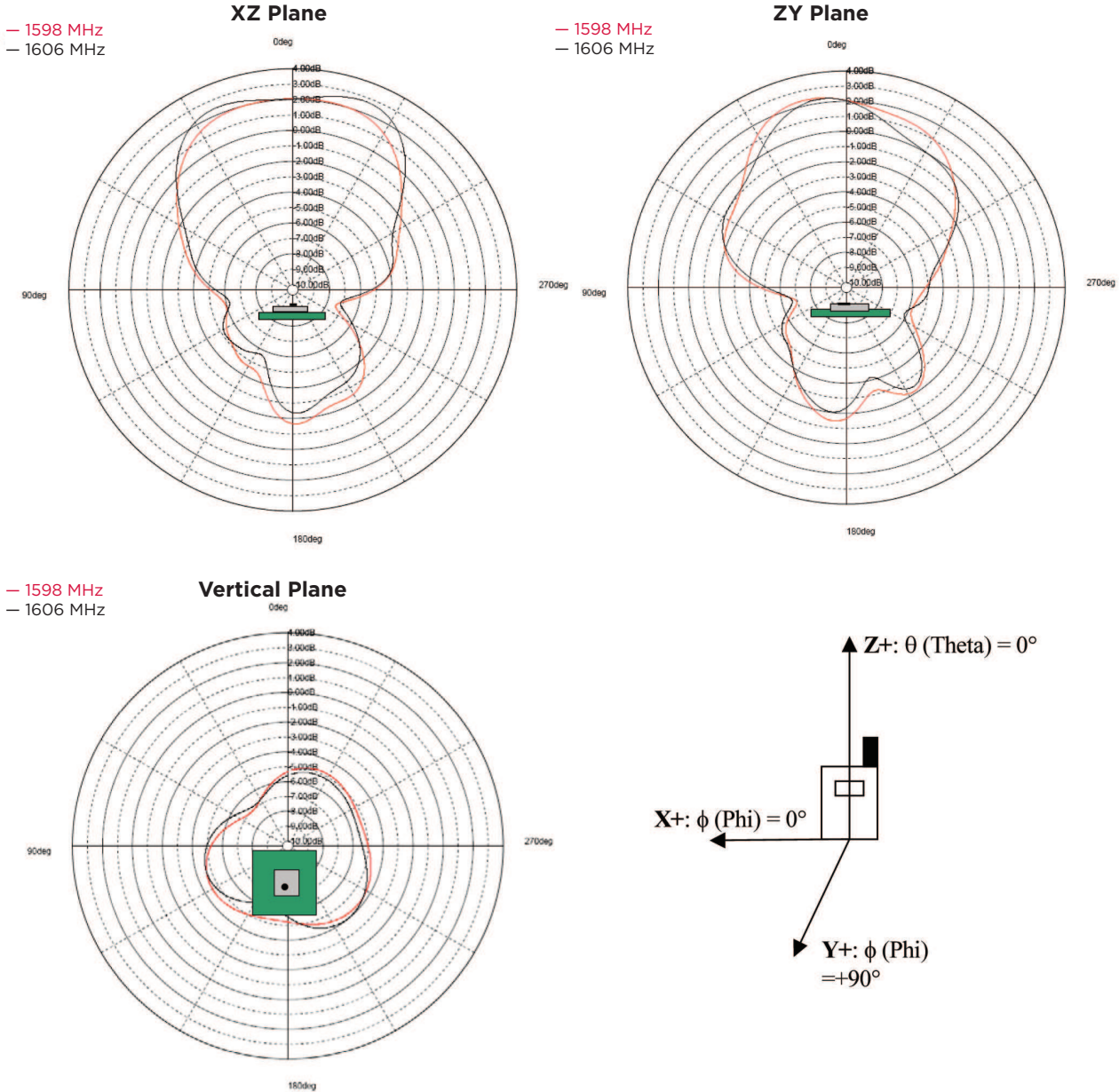


# GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216

## GLONASS Band Radiation Patterns

Typical Free Space Radiation Patterns - Measured on 50 x 50 mm ground plane



## For More Information

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