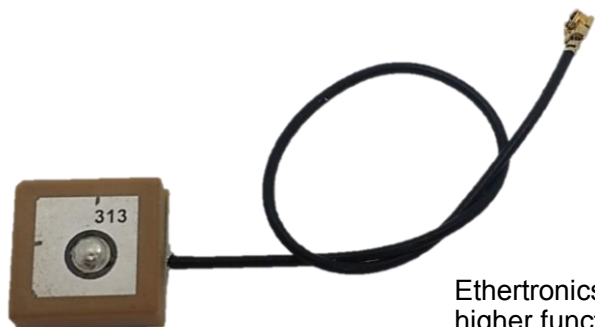


# Part No. 1004138

## GPS Active Patch Antenna

1.575 GHz



Ethertronics' antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for a GPS enabled handheld devices, media players and other mobile devices.

### Active Patch GPS

1.575 GHz

#### KEY BENEFITS

##### Stay-in-Tune

IMD antenna technology provides superior RF field containment, resulting in less interaction with surrounding components.

##### Quicker Time-to-Market

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

##### Reliability

Products are the latest RoHS version compliant.

#### APPLICATIONS

- Embedded design
- Cellular, Headsets, Tablets
- Gateway, Access Point
- M2M, Industrial devices
- Handheld

#### Electrical Specifications

Typical Characteristics, on 13 x 13 mm PCB  
(when covered with radome on LNA ground plane.)

Frequency	1.575 GHz
Mounting	13 x 13 mm
Center Frequency $f_0$	1575.42 $\pm$ 2.0 MHz
Bandwidth	10 MHz min
Gain at Zenith	1.0 dBic (typ)
Polarization	R.H.C.P
Impedance	50 ohm
Output VSWR	2.0 (typ)
Operation Voltage	3.0 $\pm$ 0.1 V

#### Mechanical Specifications

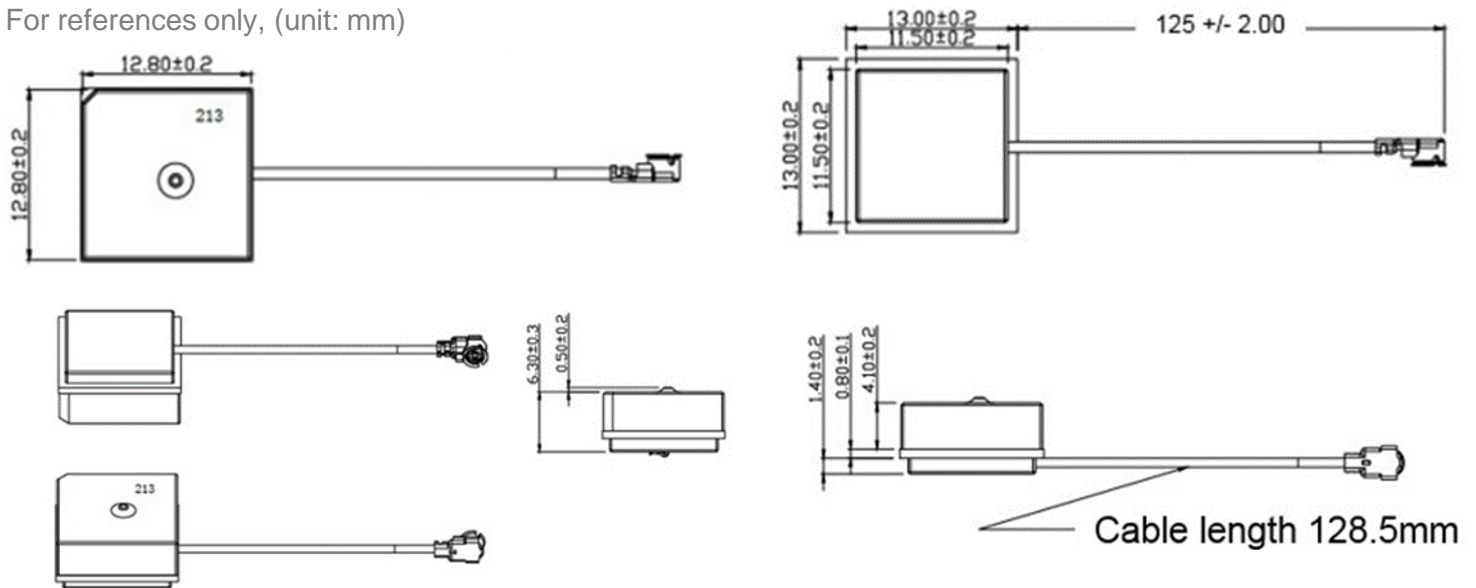
Size	13 x 13 x 6.95 mm
Mounting	Surface mounted to the PCB
Weight	4.5 $\pm$ 1 g (typ)
Packaging	Plastic Tray
Connector	IPEX MHF
Cable	RF $\varnothing$ 1.13 130 mm

**GPS Active Patch Ethertronics' Embedded Antenna Specifications**
**Filter/LNA Specification**

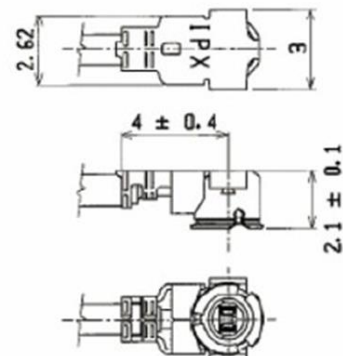
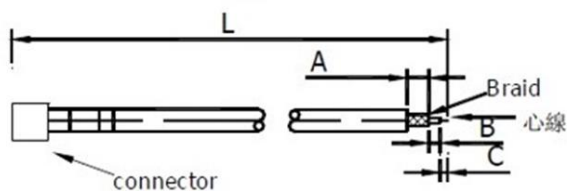
Gain	21 ± 3 dB (DC = 3.0 V)
Noise Figure	1.5 dB typ (DC = 3.0 V)
Output VSWR	2.0 max (DC = 3.0 V)
Current (DC = 3.0 ± 0.1V)	4.5 ± 1.5 mA

**Antenna Dimensions**

For references only, (unit: mm)


**Cable Length Dimensions**

For references only, (unit: mm)

**Cable Length:**

**Connector** : I-PEX MHF , Cable : RF Cable φ0.8(灰色)

L : 128.5 +/- 2.00mm A : 1.5±0.5mm B : 1±0.3mm C : 1±0.3mm

**Connector** : I-PEX (此為示意圖，其圖一內應有線徑標示"08")

\*All dimensions provided in this document are for informational purposes only.