

SPECIFICATION

Part No. : **AP.12B.07.0057A**

Spec No. : **AP.12A.01**

Product Name : 12mm Two Stage Active GPS Patch Antenna

Features : Ultra Miniature GPS active patch

High performance

Ultra low power consumption

RoHS compliant

Photo :



Specification



1.0 Introduction

This miniaturised GPS Active Antenna module combines a tiny 12mm squared ceramic patch antenna from Cirocomm with a two stage low noise amplifier. It is available as a 'plug and play' format for onboard integration with GPS receiver modules via ultra thin coaxial cable and connector from IPEX.

Only 5.5mm in height, this new Taoglas active antenna module utilises XtremeGain™ technology for the highest industry sensitivity.

Designed for use with the new generation of GPS receiver modules using chipsets from SiRF, Ublox, Nemerix, Fastrax, Navsync, Falcom, Telit, Tyco, Siemens etc.

2.0 Specification

Antenna

Frequency	1575.42 ± 1.023MHz	
Antenna Gain	Typ 1.5 dBi @ Zenith(13.4mm*13.4mm Ground Plane)	
Impedance	50 Ω	
Polarization	RHCP	
Axial Ratio	Max 4.0dB @ Zenith	
Patch Dimension	12mm x 12mm x 3.5mm	

LNA

Frequency	1575.42 ± 1.023MHz
Gain	Typ. 25dB @ 25°C ± 5°C
Noise Figure	Typ. 1.4dB @ 25°C ± 5°C
	Max 1.8dB @ 85°C

Cable* & Connector

RF Cable	Coaxial Cable ϕ 1.13 ± 0.1mm, length 57 ± 2.0mm
Connector	lpex MHFI (U.FL)



Total Specification

Frequency	1575.42 ± 1.023MHz
Gain	23.5 ± 4dBic @ 90°
Output Impedance	50Ω
Polarization	RHCP
Output VSWR	Max 2.0
Input Voltage	Min. 2.5V Max. 5.5V
Power Consumption	At 3.0V Typ. 13mA, Max. 15mA

3.0 Technical Drawing

