# **GPS Signal Radiator**

## Amp-10S series

- Amp-10S is built for the purpose to transmit the GPS satellite signal from outdoor to indoor, and re-radiating the receptions for multi-users to operate GPS Receivers inside buildings or vehicles.
- For L1 band GPS signal, meets most of the GPS Receivers on the Market.

### **FEATURES**

- Plug-N-Play, easy to use
- Wide range of Power Input, compatible with any size of vehicle almost
- The radiation range could reach one meter around
- The simple of structure make as easy installation
- For L1 band GPS signal, meets most of the GPS Receivers on the Market

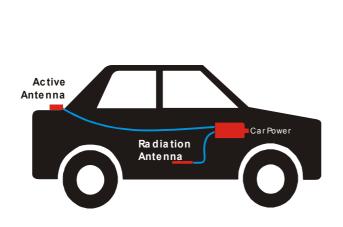
### **Introduction:**

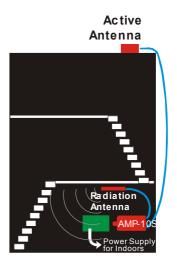
Amp-10S is a re-radiating equipment. It can receive the outdoor GPS satellite signal and conduct to indoor place for radiating again. When a GPS Satellite is revolving around the earth it will transmit continuously satellite signal to the earth, but the strength of satellite signal will weaken to only around -125dBm when it arrived to the earth ground. Such weak signal can't penetrate into buildings or vehicles; besides, its reflection or scattering signal can be detected only in around windows area.

Amp-10S is built for the purpose to transmit the GPS satellite signal from outdoor to indoor, and re-radiating the receptions for multi-users to operate GPS Receivers inside buildings or vehicles. Therefore, users can work the GPSequipments indoor same as using it outdoor.

Amp-10S contents a power regulation circuit, a high frequency low noise amplifier, a signal radiation set, and an active outdoor antenna to receive the GPS satellite signal.

Usage:





## **Application Notes:**

- Suggestion-- put the external Active antenna outdoors, better with no blocking.
- To make the distance for external active antenna and radar antenna as far as possible, too close will cause oscillation.
- The longer active antenna cable be used, the higher gain it need.

## **Specification:**

- Power Required: 10~26VDC, Less than 25mA, @12VDC input (Active Antenna not included)
- Gain: ~24dB
- Frequency: L1 Band, 1575.42 +/- 10MHz
- LED Indication: Red (For Power Input).
- Operation Temperature:  $-40^{\circ}$ C  $\sim +80^{\circ}$ C
- Operation Humidity: 5% ~ 95%
- Dimension: 107 x 67 x 20 mm (Main Body)
- Weight: 110 g
- Radiation Antenna: the length of Dipole are 6 cm

the length of RG-174U Cable are 200 cm

- Radiation Antenna Range: one meter around
- MCX connector: providing 5V, 25mA power for the External Active Antenna
- External Active Antenna Impedance: 50 ohm
- External Antenna Gain: average 26dB need, for 2-5 meter cable, but it may depends on the length of cable



## Amp-10S Radiation Antenna



## Active Antenna

## Accessories:

### 1. Active Antenna

- 5 meters cable (Standard)5 meters cable (Optional)
- 2. Power Supply for Indoors (Optional)