

# *L1GPSA-N*

## *L1 GPS Active Antenna*

### *Technical Product Data*



#### **Features**

- **High Gain**  
38dBi typical
- **Low Noise Figure**  
1.8dB typical
- **Pipe/Pole Mount Included**  
Optional L1RAMB Mount with Base and Pole available separately
- **Low Operating Current**  
20mA typical
- **Low VSWR**  
typical 1.5:1
- **Right-hand circularly polarized**
- **Enhanced immunity to lightning surge**  
IEC61000-4-5 Level 4 (4000V)  
prevents antenna failure caused by induced lightning

#### **Description**

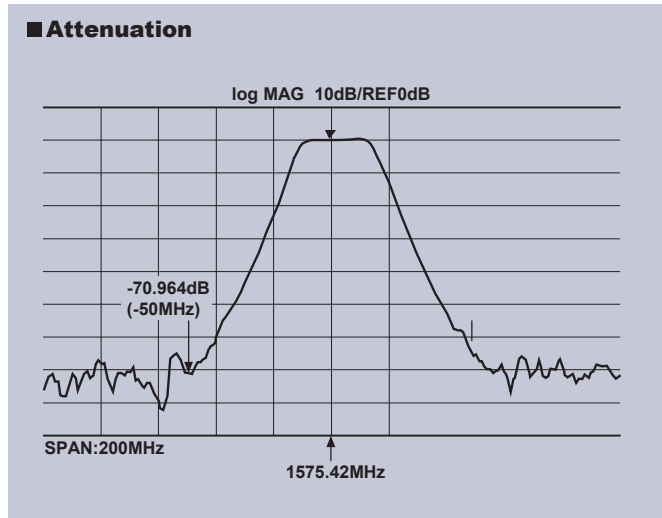
The L1GPSA-N is a 38dB gain GPS antenna designed for the L1 carrier frequency. Designed for timing and synchronization applications, the L1GPSA-N maintains excellent performance under severe environmental conditions (rain, snow etc.). It also features high gain, low noise figure and a low operating current. With convenient mounting options, the L1GPSA-N is an excellent choice for ensuring a strong reliable GPS signal.

## Electrical Specifications, T<sub>A</sub> = 25<sup>0</sup>C

| Parameter                   | Conditions                       |     |                  | Max | Units |
|-----------------------------|----------------------------------|-----|------------------|-----|-------|
| Freq. Range                 | Ant – J1                         |     | 1575.42 +/-1.023 |     | MHz   |
| In/Out Imped.               | Ant, J1                          |     | 50               |     | Ω     |
| Polarization                | Right-hand circularly polarized, |     |                  |     |       |
| Noise Figure                |                                  |     | 1.8              |     | dB    |
| VSWR                        | Ant - 50Ω                        |     | 1.5:1            |     | -     |
| Operating Voltage           |                                  | 4.5 | 5.0              | 5.5 | Vdc   |
| Operating Current           |                                  |     | 20               | 27  | mA    |
| Immunity to Lightning Surge | IEC61000-4-5 Level 4             |     |                  |     |       |

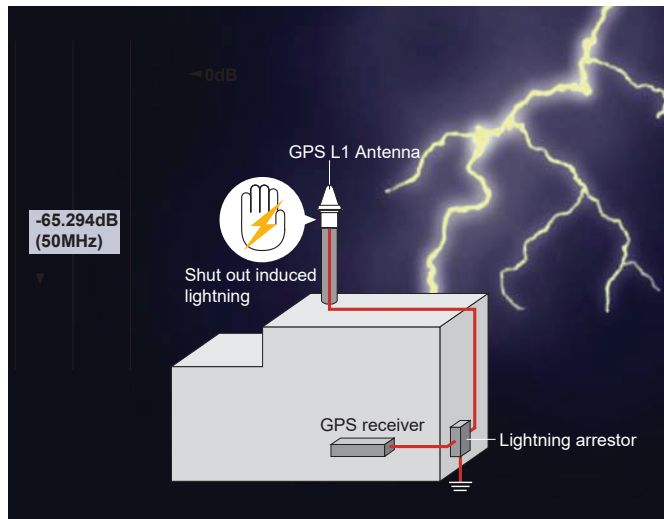
### Immunity to noise and interference

Secure performance by attenuating noise and interference near GPS L1 frequency through triple filtering design



### Immunity to lightning surge

Model with enhanced immunity to lightning surge [IEC61000-4-5 Level 4 (4000V)] preventing antenna failure caused by induced lightning



**Part Number**

**L1GPSA - N**

Model Number/Part Number:

**L1GPSA: L1 GPS Active Antenna**

Connector Options:

**N: N type female only**

**Mechanical and Environmental**

Dimensions:

Height: 98.4 mm

Diameter: 88.5 mm

Width: 0.75" (+0.438" including mounting tabs)

Weight:

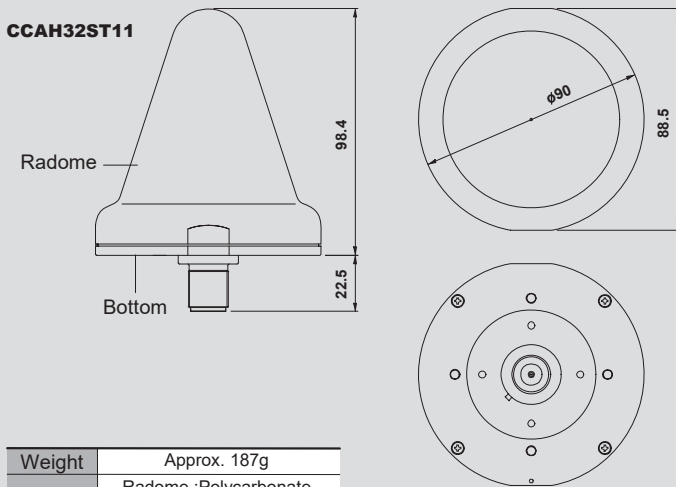
187 grams)

Operating Temp. Range: -40° to + 85°C

Storage Temp. Range: -45 to + 85C

**■ Dimensions**

(Unit:mm)



**N connector    Mounting Base (included)**



|          |                           |
|----------|---------------------------|
| Weight   | Approx. 187g              |
| Material | Radome :Polycarbonate     |
|          | Bottom :Die-cast aluminum |

**■ Product model**

|               |           |
|---------------|-----------|
| Part No.      | CCA32ST04 |
| Connector     | N         |
| Mounting Base | (B)       |

Model with enhanced immunity to lightning