

## WPANT65012-R1A

### GPS L1 Band Active Patch Module



### Description / Application

This is a 12mm X 12mm Active Patch Module for GPS L1 Band frequencies. This can be used in portable navigation & tracking applications. The module consists of a circularly polarized patch antenna and a single stage Low Noise Amplifier (LNA). It comes with a U.FL cable and an IPX / Hirose equivalent connector.

We can assist your engineers to optimize mounting positions for these antennas in your specific application and can further customize the antennas for your specific needs. Please contact [sales@worldproducts.com](mailto:sales@worldproducts.com) with your specific application requirements.

### Electrical Properties

|  |                 |
|--|-----------------|
| <b>Operating Frequency</b>                                 | 1567 – 1583 MHz |
| <b>Approximate Antenna Impedance [<math>\Omega</math>]</b> | 50 $\Omega$     |
| <b>LNA Gain [dBi] (Typical)</b>                            | 20 dBi          |
| <b>Active Antenna Peak Gain [dBi]</b>                      | 20 dBi @ Zenith |
| <b>Voltage [V] (Typical)</b>                               | 2.3 – 5.5 V     |
| <b>Current [mA] (Typical)</b>                              | 6 mA            |
| <b>Noise Figure [dB] (Typical)</b>                         | 1.8 dB          |
| <b>Polarization</b>  | RHCP            |
| <b>Axial Ratio [dB] (Typical)</b>                          | 3 dB            |

### Mechanical / Environmental Properties

|  |  |
|--|--|
| <b>Patch Dimensions</b>                | 11.8mm X 11.8mm X 4mm                    |
| <b>Module Dimensions</b>               | 11.8mm X 11.8mm X 6.5mm                  |
| <b>Cable</b>                           | 100mm long 1.13mm OD Micro Co-ax         |
| <b>Connector</b>                       | IPX / Hirose equivalent                  |
| <b>Operating / Storage Temperature</b> | -40°C to +90°C                           |
| <b>Environmental</b>                   | IP67 rated; Meets standards for UL 94V-0 |
| <b>Hazardous Materials</b>             | RoHS Compliant                           |

Pictures of the Antenna

