

# SoftSpot

Real-Time Software GNSS Receiver



**SYNTONY**  
GNSS

## Locate And be Located

Whether your business' domain is **Aeronautics, Space, Research, IoT or Telecoms**, as an OEM, you are faced with the similar need for performance, increased precision, versatility and cost effectiveness

This is why Syntony has created SOFTSPOT, the only Real-Time Capable Software GNSS Receiver on the market designed for running on your high-end embedded platform or mobile system.

The reference version of SOFTSPOT runs in Real Time (C language) on PCs. It can either be delivered as simple software running on our customer's hardware, or together with a hardware platform (reference, on PC) or be embedded (RF, Numeric, or both).

SOFTSPOT takes, as entry, the I/Q coming from the RF Stage at intermediate frequency, with no need of FPGA for correlators (entirely software).

SOFTSPOT does the cold and warm acquisition, computes the correlators, makes the tracking, computes the pseudoranges, and at last, the PVT, the trajectory, and can display every parameter and output on the monitor.

A Dedicated Pack is available for Laboratory configurations, where the PC is delivered (and configured), together with an "Off-The-Shelves" RF Stage for direct use of SOFTSPOT on the PC.

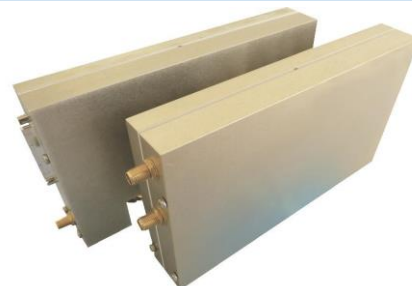
SoftSpot can also be used for in depth Real Time analysis of the received signal, and display all issues like abnormal C/NO, unrealistic PVT solution, errors inside the navigation message, satellites out of order, etc.

Software Defined Radio makes the difference

- Versatile, upgradeable, adaptable to customer's requirement

- Compatible with any future signal
- Allows improving functioning even after satellite launch
- Software can run on customer's board

*SoftSpot can be delivered in different form factors. The robust enclosure is depicted to the right.*



- ✂ Multiple GNSS Signal Receiver
- ✂ 1, 2 or 3 channels
- ✂ High Performance GNSS reception
- ✂ Robust to vibration & temperature stress (-45 to 100°C)
- ✂ Full post delivery upgradability
  - Functional & Performance improvement
  - Compatibility enhancement
- ✂ ADC 14 bits I/Q
- ✂ 100Mhz sampling rate (max)
- ✂ AGC 60db + 70db amplification (each channel)
- ✂ From pure L1C/A up to Multi-GNSS,
- ✂ Mono or Multi-frequency,
- ✂ Single or Multi-antenna
- ✂ Autonomous module or RF + Software on customer's processor board