

escPNT™ - Resilient Positioning, Navigation and Timing

The world is dependent on reliable and accurate position and timing data. GPS signals are challenged in urban environments and other areas due to obstructions, RF noise and reflections. Additionally, there is a growing threat from signal jamming and/or spoofing. There are many PNT solutions on the market today that attempt to address such issues. These solutions tend to be very large, heavy, require significant power, and are very costly. Those limitations significantly limit applications in combating the evolving threats for the warfighter and meeting commercial demands in the private sector.

escPNT™ provides an affordable, small, light, low-power solution (low SWaP) to centimeter accurate positioning applicable across multiple markets, and mission/business needs.









Features

- Position and attitude determination
- Fast RTK fixing with Multi-GNSS (including Galileo, GPS, GLONASS, Beidou, SBAS)
- On-board sensors (barometer, IMU, clock, temp)
- Other external data sources:
 - Odometry, EO/IR, LTE
- Precise Positioning:
 - horizontal accuracy: 0.015 m + 1 ppm (*)
 - vertical accuracy: 0.030 m + 1 ppm (*)
- Precise attitude (heading, pitch, roll):
- sigma = 0.25° for 1 m between antennas
- Board size: 110mm x 80mm x 30mm
- Power consumption:
 - Peak: 15W (3A)
 - Average: 6.5W (1.3A)
- Multiple communication interfaces:
 - LTE, WLAN, Ethernet, CAN, UART, USB
- Power: USB-C at 5V

ROI

Tightly-coupled multi-sensor data fusion enables resiliency, accuracy, and reliability. Centimeter accuracy in GPS challenged environments.