GPS/GLONASS RTK Receiver Module

The Ashtech MB100 GNSS board has been developed for applications when power consumption, size and dependable performances such as raw data quality, real-time positioning (SBAS up to RTK) or GNSS heading + pitch/roll determination are critical. The MB100 is designed to address L1 GPS+SBAS applications - including heading + pitch/roll determination.

Ashtech's Z-Blade Technology and dual-frequency GPS configuration offerlong-range RTK performance, while single-frequency GPS + GLONASS configuration provides more satellites in view for demanding environments.

Embedded Z-Blade GNSS centric technology uses all available GNSS signals equally, without any constellation preference, to deliver fast and stable solutions.

The MB100 works as a base, a rover and a GNSS compass and is available in various GNSS modes to adapt to user needs. All GNSS modes are available in the same hardware and are simply activated by firmware option activation. MB100 supports standard and advanced RTK operations such as:

- RTK against a static base, with or without SBAS and GLONASS satellites
- Advanced RTK against an external moving base for relative positioning
- Network RTK using third-party network corrections: VRS, FKP, MAC
- Heading and pitch or roll determination with baseline length auto-calibration
- Up to 20Hz fast RTK and raw data output

The MB100 features two antenna input connectors, with automatic switching between the two antennas for specific applications such as handheld and tablet PC integration or Heading + Pitch/Roll determination - the ideal, low-cost GNSS compass solution!