AT GNSS-01 Multi System GPS Receiver

The AT GNSS-01 is a highly accurate Multi System GPS Receiver. It provides concurrent reception of GPS, QZSS, GLONASS and BeiDou satellite navigation systems. The AT-GNSS-01 has a significant operational advantage over single GPS system receivers giving the following user benefits:

- Higher position accuracy
- Faster cold start position acquisition times
- More robust against interference
- Improved acquisition success in harsh signal environments
- Higher immunity to jamming and spoofing
- Intelligent EW detection and removal
- RF filtering for adjacent radio transmitters
Applications of the AT GNSS-01 include: situational awareness, vehicle and asset tracking systems, surveying, mapping & GIS for users such as Emergency Services, Police, Mining and Energy resources, Forestry and Governmental infrastructure services. The AT GNSS-01 can also provide accurate time synchronisation for secure frequency hopping radios in applications such as Armed and Border forces, Police & Security and Coast Guard.

Conventional Global Navigation Systems use the US controlled GPS system, however in recent years additional satellite position systems have been launched. These include GLONASS (Russian) and BeiDou (China) and the QZSS (Japan) position augmentation system.

The AT GNSS-01 is able to receive signals from all these systems to provide a far more robust solution for positioning. The AT GNSS-01 has a 76 Channel receiver with industry leading navigation sensitivity. From 1st power on the system gains position accuracy within 26 seconds, from hot start systems achieves accuracy within 1 second.

For security, military and other tactically sensitive applications the AT GNSS-01 provides additional benefits from its ability to provide increased immunity to jamming and spoofing techniques commonly employed in military countermeasures. The AT GNSS-01 has intelligent EW signal detection and using advanced algorithms is able to significantly reduce the impact to positioning data from the system. In locations where there is strong RF noise emanating from adjacent radio transmitters the AT GNSS-01 employed additional advanced RF filtering techniques to reject these unwanted signals again providing significant tactical advantages.

The AT GNSS-01 is an ideal system add on to military systems where it can be interfaced with situational awareness mapping systems as well as tactical radios systems that use the signal embedded with the voice and data communications to provide position information and time code for synchronisation purposes.

The AT GNSS-01 is able to interface with radio transceivers to provision position and time code for tracking and synchronisation purposes. The AT GNSS-01 is compatible with all standards based tactical radio systems from reputable manufacturers.

The full feature of the AT GNSS-01 are tabled below:

Concurrent reception of GPS, QZSS, GLONASS, BeiDou
76-channel receiver,
Industry leading –167 dBm navigation sensitivity.
Up to 18Hz update rate (single GNSS).
Positioning accuracy 2.0m CEP.
Acquisition Cold start 26sec, Hot Start 1 sec.
Embedded wideband and omnidirectional GNSS antenna.
Small rugged and waterproof IP67 enclosure.
Optional magnetic mount capability.
Exceptional jamming immunity with active CW detection and removal.
Operates from 10 to 35V DC.
Low current consumption.
RS232 NMEA data output.
Time pulse output.
Additional RF filtering for operation near radio transmitters.
5m interface cable, 6 conductor 28AWG

AT GNSS-01 Multi System GPS Receiver - Tracking