## Geodetic GPS

Is the moment coming when our GPS product survey will have to be renamed? Any new title should reflect the existence and use of GLONASS receivers, combined GLONASS/GPS receivers and Galileo receivers. But the results of this year's product survey do not yet give reason for such a step.

Healthy and stable competition has emerged over the years among manufacturers of receivers. Satellite signals coming to us from space, GPS next to GLONASS, and in the future Galileo, each have their own characteristics. These make the signals in part complementary to each other. From a technical point of view this opens up perspectives on exciting new possibilities in accuracy, reliability and fields of application. Hence new receivers that might yet turn the market upside down and as a consequence demand renaming of our survey.

Standardisation is becoming more and more common, making it possible to compose your own system using components from different suppliers. New in this respect, however, is the combination of GPS receivers with other sensors like tachymeters. Although not yet as integrated, these, like the former EDMs, are top-mounted, showing steps towards such thorough integration.

The outline of present developments is clear: the weight of the systems decreases along with the required number of cables, and Bluetooth finds its applications. Some systems are prepared to receive and process correction data like WAAS, EGNOS and MSAS, although this is not yet bringing centimetre accuracy.

## **Participating Companies**

In the survey the following companies participated:

- Leica Geosystems: Leica ATX1230/ GX1230, Leica GRX1200 Pro./Classic/Lite, Leica GX 1220/GX1210, MNS1230/MNS1210
- NavCom Technology: NCT-2030M, StarFire Receivers SF-2040G/SF-2050G/SF-2050M/ VueStar, RTK Receivers RT-3010S/RT-3020S/ RT-3020M
- NovAtel: OEM4-G2 Receiver Board, FlexPak G2L Receiver Enclosure, DI-4plus Receivers Enclosure
- Septentrio: PolaRx2\_SBAS, PolaRx2\_OEM/PolaRx2e\_OEM,PolaRx2/PolaRx2@ (multi-antanna/attitude)/ PolaRx2\_TR (Timing/Reference Station)
- Sokkia: GSR2600/L1, L2 Modular System, Radian IS/L1, L1 Integrated System, Stratus/ Integrated L1 GPS System, GSR2650 LB/L1, L2 L-Band System
- Stata: PenmapGPS-RTK
- Thales: ProMark2, Z-Max,
- Topcon: Legacy E+, HiPer GGD/ HiPer+/HiPer Pro, Odyssey-RS, GB-1000/ GB-500
- Trimble: R7 GPS Receiver/ 5700 GPS Receiver, R8 GPS Receiver/5800 GPS Receiver, Trimble NetRs, 4600 LS Surveyor/ 5700 L1
  GPS Receiver

https://www.gim-international.com/content/article/geodetic-gps