Satlab Announces SLX-1 Multi-application Receiver Mobile Upgrade

Sweden-based survey and GIS equipment maker Satlab Geosolutions has released an upgrade to its multi-purpose, multi-frequency SLX-1 GNSS receiver. The SLX-1 was initially released as a CORS receiver but is now able to function as a mobile sensor suitable for any application where a rugged multi-application GNSS receiver is required.

Based on embedded Linux operating system, the SLX-1 is a true multi-user and multi-tasking solution. The CORS design is ideal for long, unattended and continuous operation and its mil-spec construction makes it ideal for mobile operations in the most rugged of environments. The receiver tracks GPS, GLONASS, BDS, Galileo, QZSS and SBAS constellations and can maximise the tracking to observe all visible GNSS satellite signals, thereby providing maximum performance for accuracy.

Corrections

With in-built Ethernet, 3.5G wireless, Wi-Fi, Bluetooth and multiple serial communications for data transmission and/or reception plus 64GB (expandable) internal memory, the receiver can simultaneously transmit and receive corrections while recording raw data in multiple sessions. The SLX-1 supports real-time TCP/IP, Satlab Internet RTK and NTRIP in both Server and Client modes, as well as external radio Tx/Rx making it compatible with most modern GNSS receivers on the market.

Thanks to high-performance and high-precision GNSS measurement techniques, direct-millimetre accuracy is obtained with the highest levels of quality assurance. CMR, CMR+, sCMRx, RTCM2.x, RTCM3.x, RTCM32 and Binex differential formats as well as Rinex and Raw data logging/output are all supported so the receiver can be easily integrated into existing CORS networks or into SatLab's VRS NRTIP Caster Software or SatLab's proprietary intRTK Cloud service. Equally, in Rover mode it can easily connect to any existing correction Network or Single Base source using any of its in-built communication modes.

Control and operation

Control of the receiver is easily achieved by logging into the internal web server either remotely or via direct connection using the Ethernet port or the in-built Wi-Fi hotspot. In Rover mode, real-time NMEA messages can be sent via any of the two RS232 or single RS485 ports, or via Bluetooth. It also has an external clock interface, Event marker and PPS output.

With a rugged anodised aluminium alloy metal case, internal lithium battery for up to 24 hours independent operation, two lane external voltage inputs with range 7-36VDC and PoE, the SLX-1 is designed to stay on regardless of environmental factors. If power is lost, once restored the receiver will re-boot using the last settings and continue working normally.

Bjorn Agardh, CEO of Satlab, commented that this is an exciting upgrade to their popular SLX-1 CORS receiver, and now adds true multi-functional performance for both Base and Mobile operations to the company's increasing range of GNSS mobile products. The simplicity of the SLX-1 combined with its sophisticated capabilities and Satlab's leading free Internet RTK global server services makes provision of correction data seamless and simple, he added.

The mobile upgrade for the SLX-1 receiver is available now with a simple firmware upgrade as a free download. Satlab Geosolutions is exhibiting at GEO Business at stand A1.