

Global Decimetre-level Positioning without Reference Station



Altus Positioning Systems, Germany, has introduced the APS-3L high-precision GNSS receiver. The APS-3L is the first GNSS survey receiver on the market with embedded L-band capability to work with the Veripos TERRASTAR-D differential correction service. When out of wireless range of terrestrial UHF radios or cellular networks, the system seamlessly transitions to L-band satellite connections for continuous decimetre-level PPP.

It was shown for the first time to the worldwide surveying community at the Intergeo trade fair in Hannover, Germany, in October 2012. The APS-3L provides real-time kinematic (RTK) and precise point positioning (PPP) with integrated embedded UHF, cellular, and L-band satellite differential interfaces.

TERRASTAR-D is a new satellite differential service just introduced by Veripos for land-based surveying applications. TERRASTAR-D provides position accuracy at better than 10 cm (95 percent), with robust performance even in areas of high ionospheric interference. TERRASTAR-D provides complete global dual-beam coverage through a network of more than 80 reference stations transmitting on seven L-band satellites. All reference stations are housed in secure locations and equipped with dual redundant systems and back-up power. Operating on seven independent satellites with overlapping coverage means that a minimum of two satellites are always visible at most locations in the world.