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Press Release

u-blox releases TIM-4R dead reckoning GPS module

For immediate release

FOR IMMEDIATE RELEASE



(Download the image from http://www.u-blox.com/news/tim_4r.jpg)

u-blox releases TIM-4R dead reckoning GPS module

Thalwil, Switzerland -- November 27, 2006 -- u-blox AG, the leading Swiss provider of GPS chips, modules and services, today released the TIM-4R GPS module with dead reckoning technology that ensures 100% road coverage in even the most challenging GPS signal environments.

Powered by u-blox' 16-channel ANTARIS® 4 positioning engine, this GPS module provides uninterrupted positioning in environments where GPS operation was previously not possible and offers better navigation performance using less power than its predecessor, the TIM-LR.

u-blox' dead reckoning technology uses additional sensors that detect travelled distance with an odometer and turn rate using a gyroscope, supplementing GPS data and thus providing an accurate position in tunnels, indoor parking facilities, roofed logistics centers, urban canyons and any other environment where obstructed GPS signals hinder positioning.

Continuous coverage allows for GPS-enabled applications such as emergency vehicle services, asset and vehicle tracking products and road pricing systems, which require uninterrupted navigation.

"The TIM-4R is a gateway technology that simplifies the creation of a wide range of GPS-enabled applications that require a highly accurate positioning solution with non-stop road coverage, even in the harshest signal environments," said Thomas Nigg, Head of Product Marketing and Application Engineering.

Other systems use either GPS or dead reckoning, both of which have shortcomings. In contrast to switching between GPS and dead reckoning, which can lead to errors, the module's speciality lies in its weighted mix of both approaches that counters their respective disadvantages. Its built-in extended Kalman filter algorithm uses a combination of GPS and sensor data where the weighting depends on the quality of the GPS signals. Depending on the quality of the GPS signal and on how well the dead-reckoning sensors are calibrated, a weighted mix of both GPS and dead reckoning generates optimal results.

Narrow streets between high-rise buildings also cause multi-path effects, resulting in degraded navigation accuracy and reliability. The TIM-4R's algorithmic approach eliminates these multi-path effects, position inaccuracies, and distortions from jamming sources.

Samples will be available in February 2007.

A photograph can be downloaded from www.u-blox.com/news/tim_4r.jpg.

About u-blox

u-blox is an international company headquartered in Switzerland, with sales organizations in the Americas, Europe and Asia. Founded in 1997, u-blox develops leading positioning technology, products and services based on Global Navigation Satellite Systems (GNSS), including GPS and Galileo, for the automotive and mobile communications markets. For more information, please visit www.u-blox.com.

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