

# SkyTraq Introduces GNSS Receiver Module Offering Continuous Positioning



SkyTraq, a Taiwan-based GNSS positioning technology company, has introduced the all-in-one S2525DR8 GNSS dead-reckoning module with onboard integration of MEMS sensor and interface logic. The module is especially suitable for road vehicles requiring high accuracy and 100% positioning availability.

Based on SkyTraq's latest Venus 8 multi-GNSS platform and using a high-performance, automotive-grade XV-8100CB analogue output gyroscope and 16bit differential ADC, the S2525DR8 offers high-level accuracy for both indoor and outdoor positioning. A 3D option adds a barometric pressure sensor on board, offering improved accuracy in altitude reading and altitude change detection over an accelerometer-based scheme in 3D dead-reckoning. Another vehicle dynamics monitoring option adds an accelerometer on board,

offering high-accuracy vehicle acceleration monitoring for driver behaviour characterisation, accident reconstruction analysis and trigger event recording.

The S2525DR8 is compact in size, measuring just 25mm x 25mm. It contains a level shifter on board which is able to directly interface with the vehicle odometer and forward/reverse signals ranging from 3V to 30V. The SPI interface pins on the module allow autonomous data logging to an external SPI Flash memory device.

## Continuous navigation

For high-performance vehicle navigation systems, the S2525DR8 provides continuous navigation, even inside tunnels and underground car parks where there is no signal. In the case of a stacked, multi-level highway or a multistorey car park, the highly accurate barometric altitude enables identification of which specific level a vehicle is on. For automatic vehicle locating or fleet management systems, the location can be identified immediately after power on, whether outdoors or indoors in a signal-denied environment. S2525DR8 provides reliable, uninterrupted position, speed and heading information in challenging environments. Therefore, it is suitable for demanding vehicle navigation and tracking applications requiring the highest degree of accuracy and availability.

The S2525DR8 is manufactured in ISO/TS 16949 automotive-certified factories. An evaluation kit, sample, datasheet and reference design are available now. The 3D option with barometric sensor and vehicle dynamics monitoring option with accelerometer will become available in the latter half of Q1 2015.