

New GNSS Receiver Module Opens Door for Ultra-precise Positioning for High-volume Applications



Septentrio has announced that it is starting high-volume production of mosaic TM-X5, the next-generation multi-constellation and multi-band receiver module. Featuring the latest GNSS technology, mosaic TM-X5 brings centimetre-level positioning to technologies such as robotics, automation, smart wearables and telematics, among others. Its small form factor and low-power design makes high-performance positioning accessible to volume applications.

“For smooth, uninterrupted operation in the field, [mosaic TM-X5](#) is the logical choice for an industrial-grade GNSS positioning module,” said Francois Freulon, head of product management at Septentrio. “In an industrial setting, the cost of equipment downtime can quickly get out of hand. We designed mosaic TM to be robust in difficult environments,

ensuring continuous operation as well as quick set-up times for our customers.”

Compatible with all GNSS constellations

Septentrio's mosaic TM-X5 was conceived to be one of the first GNSS receiver modules on the market without performance compromises. Featuring complete multi-frequency, multi-constellation technology, mosaic TM will receive every existing and future signal from all GNSS constellations, including the American GPS, European Galileo, Russian GLONASS, Chinese BeiDou, Japanese QZSS, Indian NavIC and L-Band satellites. Such signal diversity allows maximum positioning availability, even in difficult environments such as near tall structures or under foliage. mosaic TM-X5 delivers its positioning information at an industry-leading update rate, ideal for robots or fast-moving vehicles.

This compact GNSS module features Septentrio's proprietary [Advanced Interference Mitigation](#) (AIM+) technology, which shields the receiver from jamming and malicious spoofing. This allows machinery and robotics equipped with GNSS to keep on working, instead of being grounded by RF interference. mosaic TM-X5 also includes the [RAIM+](#) integrity engine, essential for safety-critical applications such as autonomous systems.

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