Miniature sensor features onboard GPS receiver

MicroStrain releases the 3DM-GX3-35, a miniature, lightweight sensor (23 grams) featuring a high quality attitude heading reference system (AHRS) and an onboard global positioning system (GPS) receiver. The AHRS and the GPS can independently provide time correlated measurements ideally suited for applications where users are implementing their own host based GPS/INS Kalman Filter. The 3DM-GX3-35 is the newest member of the 3DM-GX3 family of sensors from MicroStrain. By migrating to the 3DM-GX3-35, users of the popular 3DM-GX3-25 AHRS can easily add GPS functionality while retaining the same small footprint.

A powerful new application programming interface (API) offers 3DM-GX3-35 users added features such as the ability to customize data messages for specific quantities at mixed data rates. This unprecedented user control will allow for more accurate, tailored, and robust data, as well as eliminate extraneous information and data. An innovative new synchronized time stamping feature provides attitude and GPS data correlated in time for improved data analysis. The new API is ready for the next generation of integrated inertial sensors, yet is also backward compatible allowing users to leverage existing code with minimal modification.

“Our customers are continuing to look for cost effective, highly integrated sensors for their navigation applications,” notes MicroStrain President and CEO, Steve Arms. “The 3DM-GX3-35 meets this need by combining GPS functionality with our existing high performance AHRS.”

The 3DM-GX3-35 is fully calibrated and temperature compensated throughout its operating range of -40ºC to +65ºC. Additionally, users are provided the option to specify sensor ranges including ±5g, ±1.7g, ±16g, or ±50g accelerometers, and 50°/sec 300°/sec, 600°/sec and 1200°/sec angular rate sensors. This small

integrated inertial/GPS unit is ideal in a wide variety of applications including personnel tracking, platform stabilization, automotive, and unmanned vehicles.

For more product details, visit www.microstrain.com/3dm-gx3-35.aspx [1].

Links:
[1] http://www.microstrain.com/3dm-gx3-35.aspx