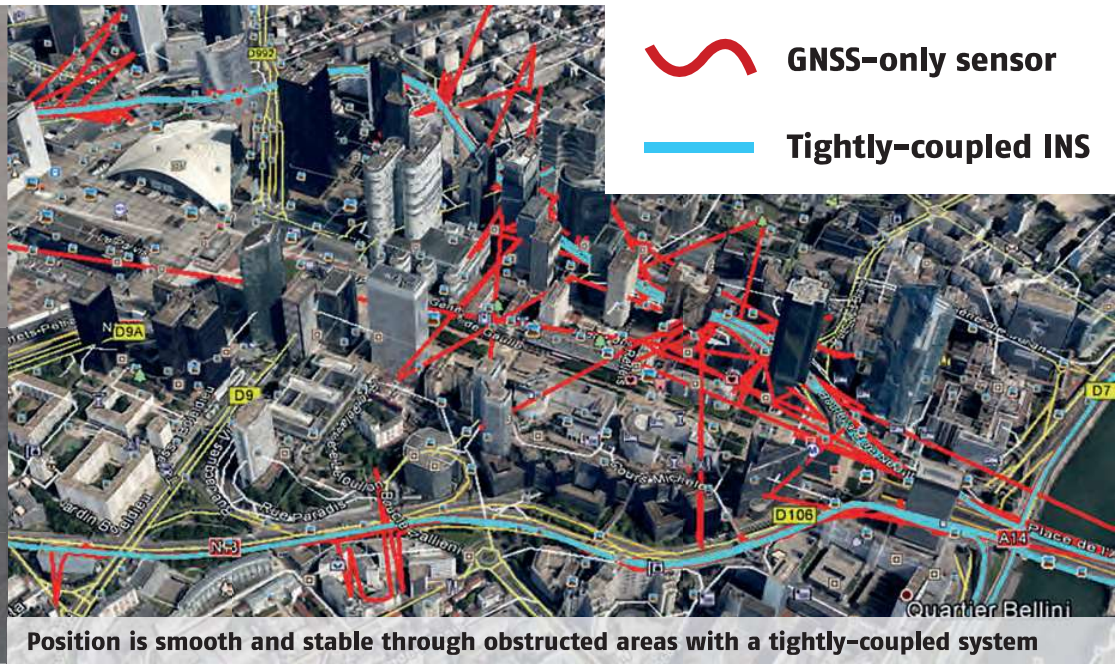
OxTS Inertial+GNSS

OxTS gx/ix™ tight-coupling technology

RTK processing and enhanced urban performance

xNAV550

RT3000



Position is smooth and stable through obstructed areas with a tightly-coupled system

>> Want RTK accuracy without having to pay for expensive post-processing software?

Need data as accurate as possible in challenging environments, but don't have the budget or space for a cumbersome FOG IMU? The OxTS gx/ix processing technology can help. It's our own RTK processing engine as well as a tightly-coupled integration of the GNSS and IMU, meaning you can add base station corrections in our free NAVsolve post-processing software for cm-level RTK accuracy and get much improved performance in GNSS obstructed areas with our great value systems.

>> Maximum accuracy

It's not always easy or feasible to transmit RTK corrections in real-time. Not having access to a mobile base station, can't get a radio connection to one, don't have a modem to connect to subscription services, or travelling distances where the baseline is too long are some reasons that could prevent applying corrections in real-time. Now with gx/ix processing, if you have logged base station corrections or can download them from a CORS network, you can add them in post-processing and achieve the highest accuracy, down to the centimetre.

>> Maximum reliability

Environments such as urban canyons, bridges, and tree cover can be a nightmare for GNSS-based systems due to multipath, reduced satellite visibility, and complete outages. The tight-coupling of the GNSS and IMU with gx/ix means that even when fewer than 4 satellites are visible, the raw GNSS data from any available satellites is still integrated into the navigation solution to provide updates and greatly reduce position drift. RTK relock time after brief obstructions is also improved with inertial relock.

Get reliable position reference data for open road testing

Quickly regain RTK lock after obstacles like bridges and overpasses

Key features

- >> Add RTK corrections in post-processing
- >> Intelligently switches processing based on environment
- >> Single satellite aiding in limited GNSS environments
- >> Inertial relock speeds up RTK reacquisistion
- >> Tight-coupling reduces multipath errors

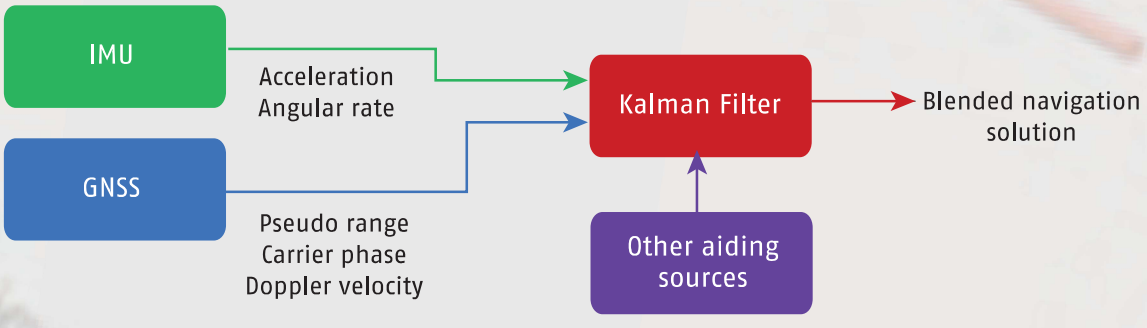
>> Compatibility

DGPS	Y
RTK*	Y
SBAS	N
GLONASS	Y
GALILEO/BDS	N

*Requires RTK capable INS and gx/ix RTK upgrade

>> Example data

	Standard	gx/ix
No solution	1.7%	0.5%
DGPS	13.8%	4.9%
RTK	84.5%	94.6%
Horizontal error RMS	0.12 m	0.03 m
Vertical error RMS	0.10 m	0.05 m



gx/ix uses the raw satellite data directly to create an enhanced navigation solution

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