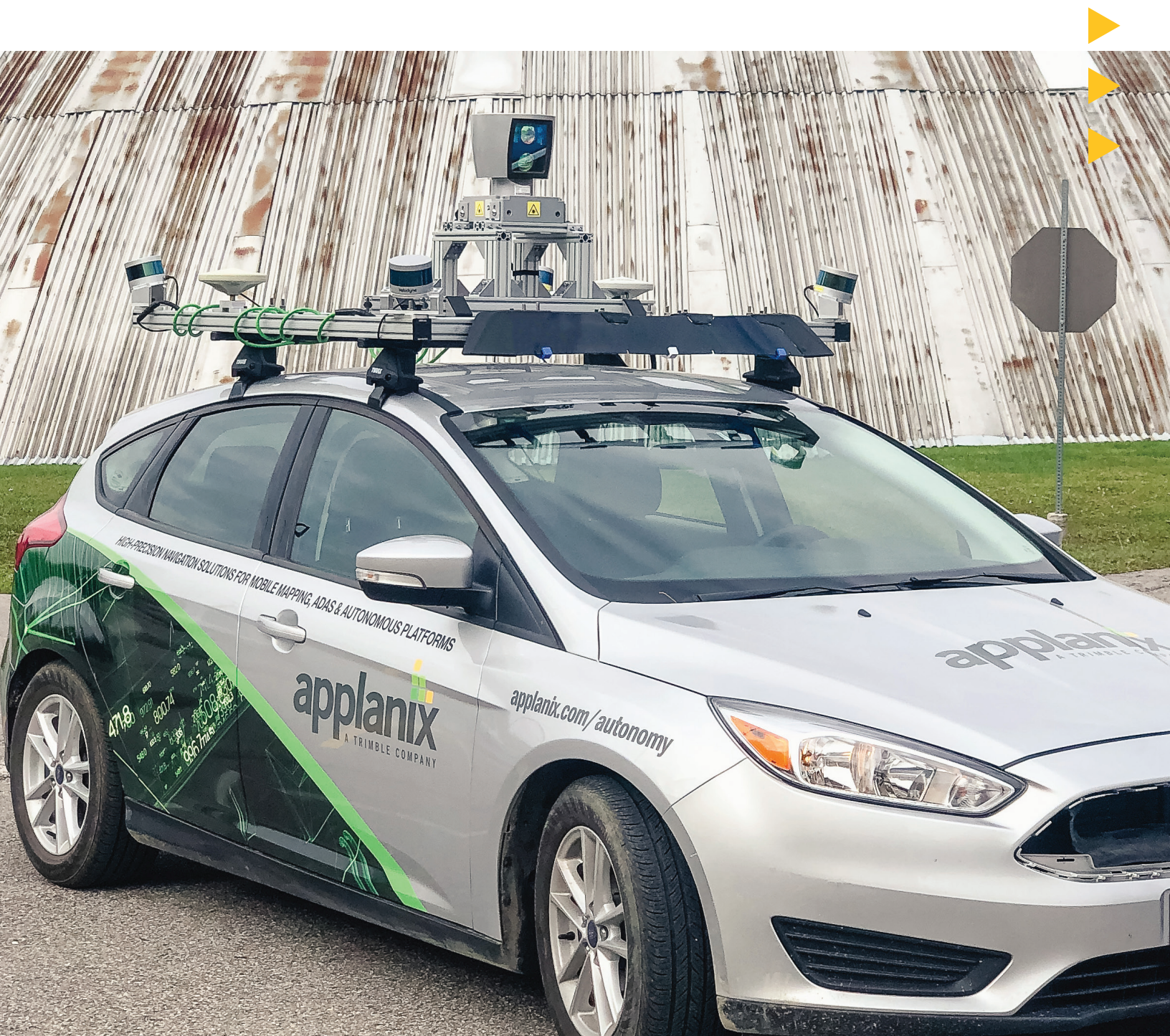





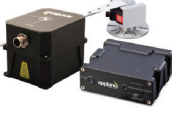


APPLANIX

# Mobile Mapping and Positioning Solutions for Land Vehicles



# Stand Alone Solutions

	Basic Performance		High Performance		
	POS LVX 120	POS LVX 125	POS LV 220	POS LV 420	POS LV 610
					
Size (mm) Weight (g)	185 x 93 x 42 760g	185 x 93 x 42 760g	167 x 185 x 68 2400 g	167 x 185 x 68 2400 g	167 x 185 x 68 2400 g
Position, Post-Processed (m) <sup>3</sup>	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03
Orientation, Post-Processed (°) <sup>1,3</sup>	R / P: 0.05° HDG: 0.08°	R / P: 0.025° HDG: 0.06°	R / P: 0.015° HDG: 0.025°	R / P: 0.008° HDG: 0.020°	R / P: 0.0025° HDG: 0.015°
Position, Post-Processed (m) <sup>2,3</sup> 60 second GNSS Outage	H: 1.20 V: 0.50	H: 0.80 V: 0.20	H: 0.24 V: 0.13	H: 0.12 V: 0.10	H: 0.10 V: 0.07
Orientation, Post-Processed (°) <sup>1,2,3</sup> 60 second GNSS Outage	R / P: 0.10° HDG: 0.50°	R / P: 0.05° HDG: 0.20°	R / P: 0.02° HDG: 0.03°	R / P: 0.02° HDG: 0.02°	R / P: 0.0025° HDG: 0.015°
GNSS Frequencies	L1 / L2 / L3 / L5 / B1 / B1C / B2 / B2A / B3 / E1 / E5a / E5b / E6		L1 / L2 / L3 / L5 / B1 / B1C / B2 / B2A / B3 / E1 / E5a / E5b / E6		
GNSS Constellations	GPS + GLONASS + Galileo + BeiDou + QZSS + IRNSS + L-Band / MSS / SBAS		GPS + GLONASS + Galileo + BeiDou + QZSS + IRNSS + L-Band / MSS / SBAS		
IMU	Internal	Internal	External	External	External
Dual Antenna Operation	✓	✓	✓	✓	✓
DMI Option	✓	✓	✓	✓	✓
POSPac Support	✓	✓	✓	✓	✓

<sup>1</sup> In degrees °; R = Roll; P = Pitch; HDG = Heading (with 2m Antenna base line)

<sup>2</sup> Typical survey mission profile, max RMS error (with DMI)

<sup>3</sup> Applanix POSPac MMS, for precise trajectory estimation and sensor geo-referencing for Mobile Mapping.

Specifications are subject to change without notification. Typical performance. Actual results are dependent upon satellite configuration, atmospheric conditions and other environmental effects. See data sheets for more details.

Applanix POS LV powers any land vehicle application where positioning and orientation is required. Used by systems integrators and OEMs around the world, Applanix provides uninterrupted measurements for mobile mapping and positioning in seemingly impossible GNSS conditions.

## MAXIMIZE YOUR ROI WITH POS LV

POS LV is a compact, fully integrated, turnkey position and orientation system, utilizing inertial technology to generate stable, reliable, and repeatable positioning solutions for land-based vehicle applications. Designed to operate under the most difficult GNSS conditions found in urban and suburban environments, POS LV enables accurate positioning for road geometry, pavement inspection, GIS database and asset management, road surveying, vehicle dynamics, and more.

## BENEFITS OF POS LV







Applanix leads the industry in robust, reliable, and repeatable positioning and motion compensation solutions for land applications. Our solution easily integrates with today's leading sensors, making it the right choice for any application. With our tested Applanix IN-Fusion+ technology, you can generate continuous, accurate position and orientation information under all GNSS conditions.

Our system operates at normal highway speeds for cost-effective data capture, and our survey-grade GNSS gives you improved positioning performance. Because of the small, lightweight POS Computer System, the POS LV requires less space in a survey vehicle. By simply driving your survey vehicle, the POS LV produces precise, high-rate, low-latency data in real time and post-processing with unparalleled accuracy.

## THE APPLANIX CUSTOMER CARE TEAM

Add our highly qualified industry experts to your team. When you purchase an Applanix solution for land, you're buying into the wealth of knowledge and expertise that has gone into developing the solution. Our experienced team of survey engineers, geospatial experts, and quality assurance personnel means you get the highest quality solution and the highest level of performance – whatever the time of day and wherever you are in the world.

# OEM Solutions

	Onboard IMU		External IMU			
	APX-18	AP+18	AP+20	AP+30	AP+50	AP+60
						
Size (mm) Weight (g)	100 x 60 x 12 62 g	100 x 60 x 21 100 g	100 x 60 x 21 100 g	100 x 60 x 21 100 g	100 x 60 x 21 100 g	100 x 60 x 21 100 g
Position, Post-Processed (m) <sup>3</sup>	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03	H: 0.02 V: 0.03
Orientation, Post-Processed (°) <sup>1,3</sup>	R / P: 0.025° HDG: 0.06°	R / P: 0.025° HDG: 0.06°	R / P: 0.015° HDG: 0.03°	R / P: 0.010° HDG: 0.025°	R / P: 0.005° HDG: 0.015°	R / P: 0.0025° HDG: 0.015°
Position, Post-Processed (m) <sup>2,3</sup> 60 second GNSS Outage	H: 0.80 V: 0.20	H: 0.80 V: 0.20	H: 0.30 V: 0.15	H: 0.24 V: 0.13	H: 0.12 V: 0.10	H: 0.10 V: 0.07
Orientation, Post-Processed (°) <sup>1,2,3</sup> 60 second GNSS Outage	R / P: 0.05° HDG: 0.20°	R / P: 0.05° HDG: 0.20°	R / P: 0.03° HDG: 0.05°	R / P: 0.02° HDG: 0.03°	R / P: 0.005° HDG: 0.015°	R / P: 0.0025° HDG: 0.015°
GNSS Frequencies	L1 / L2 / L3 / L5 / B1 / B1C / B2 / B2A / B3 / E1 / E5a / E5b / E6		L1 / L2 / L3 / L5 / B1 / B1C / B2 / B2A / B3 / E1 / E5a / E5b / E6			
GNSS Constellations	GPS + GLONASS + Galileo + BeiDou + QZSS + IRNSS + L-Band / MSS / SBAS		GPS + GLONASS + Galileo + BeiDou + QZSS + IRNSS + L-Band / MSS / SBAS			
IMU	Internal	Internal	Internal & External	Internal & External	Internal & External	Internal & External
Dual Antenna Operation	✓	✓	✓	✓	✓	✓
DMI Option	✓	✓	✓	✓	✓	✓
Dual IMU	-	-	✓	✓	✓	✓
Post-Processing Support	✓	✓	✓	✓	✓	✓

<sup>1</sup> In degrees °; R = Roll; P = Pitch; H = Heading (with 2m Antenna base line)

<sup>2</sup> Typical survey mission profile, max RMS error (with DMI)

<sup>3</sup> Applanix POSPac MMS, for precise trajectory estimation and sensor geo-referencing for Mobile Mapping.

OEMs and systems integrators have different requirements than other users. While they need the same accuracy and reliability, easy integration and development support are also important. The Trimble AP+ hardware and POSPac post-processing software offer a unified solution, and our dedicated support team is there to help with integration.

## POSPAC MMS® (MOBILE MAPPING SUITE) FOR LAND APPLICATIONS IS YOUR KEY TO POWERFUL, CONSISTENT, RELIABLE, AND ACCURATE DATA...EVERY TIME.

POSPac Mobile Mapping Suite is Applanix' next generation, industry-leading software for accurately geolocating mobile mapping sensors using GNSS and inertial technology. Optimized for all environments and platforms (air, land, and marine), and compatible with a variety of mapping sensors, this smart software solution achieves both maximum accuracy and efficiency. Now

featuring the integration of LiDAR QC Tools to improve the accuracy and reliability of mapping with LiDAR platforms and achieve the highest level of georeferencing accuracy with LiDAR sensors.

POSPac enables you to increase the scope of your project, the accuracy of your data, and your overall productivity through reduced deployment costs, extended distances and areas for mapping, and reduced re-work and production costs through rigorous quality checks. Overall this leads to an increase in profit.

## CAPTURE ACCURATE DATA THE FIRST TIME, EVERY TIME

Applanix SmartBase™ module for POSPac eliminates the need to set up dedicated stations close to the project area and shorten post-processing times so the overall cost of surveying is reduced without sacrificing accuracy. Process up to 50 reference stations at a time (minimum of four are required). Also included in SmartBase is the ability to perform a quality check on the reference station data.

# ANYWHERE ON LAND TRUST YOUR POSITION

Reduce the cost but keep the accuracy with our new Trimble AP+ Land OEM and Applanix POS LVX. Our Applanix IN-Fusion+™ technology featuring Trimble ProPoint™ GNSS technology enables you to collect the most accurate geospatial data with the lowest possible collection costs. You can now collect and process your data within one suite of tools. For Applanix hardware, the industry-leading post-processing software POSpac® MMS for land applications provides a powerful, consistent, and reliable tool for your georeferencing data needs.

With over 30 years of experience in developing and producing mobile mapping and surveying solutions, Applanix is known globally for quality, accuracy, and reliability.



APPLANIX

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TRANSFORMING THE WAY THE WORLD WORKS

**applanix**  
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