DATASHEET

RT-RANGE

One complete, integrated solution for multi-vehicle testing

All-in-one measurement solution for vehicle-to-vehicle and vehicle-to-lane testing. One "truth box" to ascertain all the range, motion and orientation measurements you need.

Delivering benefits and features including:

+ V2V and V2X measurements in real-time
+ Up to 1km range between hunter and targets
+ Multiple sensor point validation in real-time
+ Vehicle-to-lane measurements for lane-support testing
+ Network DGPS for passing correction data between vehicles
+ and more...

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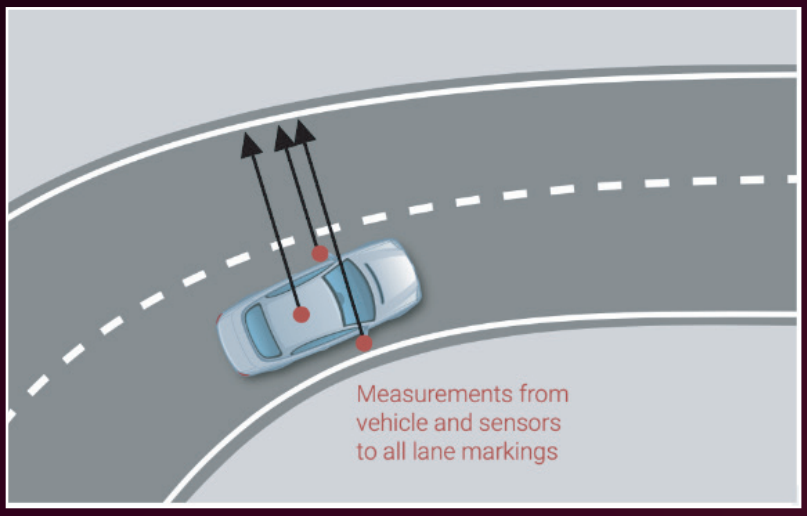
OXTS

Facilitating easier, smarter testing

Multi-vehicle testing is completely streamlined with RT-Range. Test engineers only need to set up and configure one INS, so can spend significantly less time getting the measurement data needed.

The RT3000 v3 with RT-Range brings together some of our most powerful and intelligent hardware and software capabilities to ensure that test engineers have everything needed, now and in the future, to efficiently and effectively carry out multi-vehicle tests, for a range of applications.



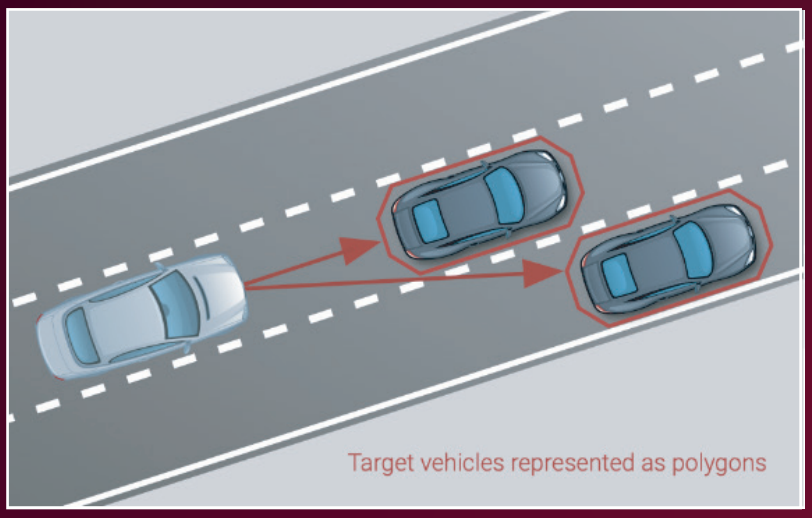
Lane Testing

RT-Range is used by test engineers to collect highly accurate vehicle-to-lane measurements relative to three configurable points on the vehicle for both Lane Departure Warning and Lane Keeping Assist tests.

Multiple target testing

ADAS testing requires tracking multiple targets simultaneously. RT-Range can track up to four targets, including feature points, fixed points or mobile targets.

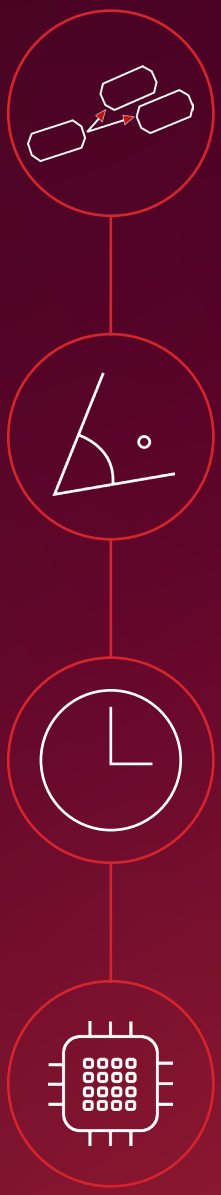
Feature points are used to track signposts and lights within a field of view while fixed points are used when testing stationary targets with shapes like a dummy car. Another INS can be installed to created a mobile target, that the RT-Range can also track.



Capturing precision measurements for a range of additional test applications, including:

+ Euro NCAP AEB City, Inter-Urban, VRU, cyclist, pedestrian tests
+ NHTSA FCW testing
+ Lane Departure Warning (LDW)
+ Blind Spot Detection (BSD)
+ Adaptive Cruise Control (ACC)
+ Park Assist and back-up aid
+ Intelligent Headlight Validation (IHV)
+ Traffic sign recognition
+ Driving robots and platforms

Why choose RT-Range?



Providing defined target shapes

+ Polygons give the Hunter and targets, mobile or fixed, a defined shape so that the RT-Range measurements are relative to the outline of the vehicle/target – a key requirement for some Euro NCAP and NHTSA tests.

All angles for sensor validation

+ When developing ADAS systems, test engineers need to know which sensor spotted the object. The multiple sensor points feature of RT-Range outputs which sensor can see the target, how far away it is and how much is visible.

Reliable, real-time data

+ The RT3000 with RT-Range Hunter has a wide variety of tests and applications. It therefore outputs data with high accuracy, with low latency and over different forms.

+ The RT3000 outputs the data over Ethernet and CAN. This allows the device to be connected to a data acquisition system, a driving robot and a computer.

Powerful, intelligent RT-Range processor

+ Onboard RT-Range processing utilises measurements captured by RTs to provide (or give) the range, orientation and relative motion of multiple vehicles.

The stats at a glance:

0.02 m
longitudinal range accuracy

0.02 m
lateral distance to lane accuracy

0.02 km/h
relative velocity accuracy

0.01°
resulting Yaw angle accuracy

DATASHEET

Software and specification

RT-Range Suite

Our RT-Range software suite is designed to provide you with the tools to complete your ADAS tests from set-up to data collection.

Configure your VUT and targets, set up lane scenarios and map up to 12 independent sensors on your VUT polygon. You can even monitor your test in real-time, with a visual display and live feedback on the measurements that matter to your test.

SPECIFICATION

Parameter	Conditions	Accuracy
Forward range*	+1000 m	0.02 m RMS
Lateral range*	+1000 m	0.02 m RMS
Resultant range*	1000 m	0.02 m RMS
Forward relative velocity	-	0.2 km/h RMS
Lateral relative velocity	-	0.2 km/h RMS
Resultant relative velocity	-	0.2 km/h RMS
Resultant yaw angle	360°	0.1° RMS
Lateral distance to lane	+30 m	0.02 m RMS
Lateral velocity to lane	+20 m/s	0.02 m/s RMS
Lateral acceleration to lane	+30 m	0.1 m/s^2 RMS

*1000 m range with RT-XLAN

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