



Radar Measurement Cart

Introduction

The Radar Measurement Cart, supplied by AB Dynamics group company DRI, takes accurate and repeatable Radar measurements of objects in the field. It can be used for verification and calibration of ADAS test targets and dummies, or for measurements of real objects to better understand their characteristics. The Radar Measurement Cart uses Differential-GPS (2 cm accuracy*) and automatic steering to control and record the position and orientation of the sensor with respect to the object. The Radar Measurement Cart can be fitted with a variety of Radar sensors as well as other sensor technologies such as Lidar, or vision sensors.



Key Features

- Target verification and calibration (ISO/SAE)
- Measurements of cars, trucks, and other objects
- Simultaneous measurement with multiple sensors
- Accurate position control using DGPS and automatic steering
- Two types of measurements:
 1. 360 degree scans
 2. Approach from one direction
- Spatial distribution of Radar Cross Section (RCS)
- Collapsible and portable for easy transport and storage
- Water resistant
- Measurements are done in the field. No need for An Anechoic Chamber or turntable.
- Turnkey solution.
- Supplied with data capture, analysis and reporting software.



* requires RTK Base station, not supplied

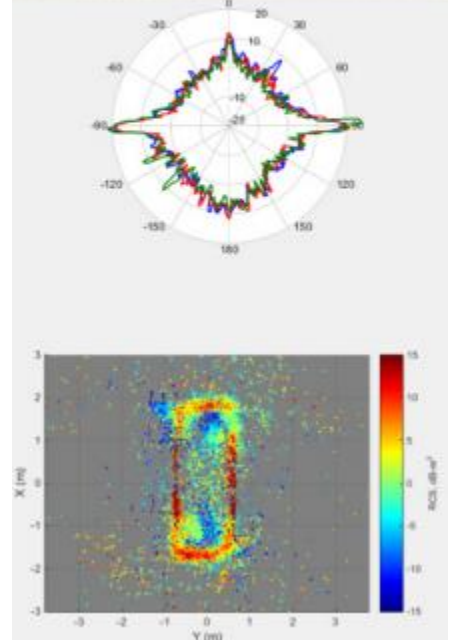
Standard Cart configuration

Measurement Cart

- Adjustable sensor height (0.22 to 0.96 m)
- Automatic steering for path following
- Touchscreen computer with optional external storage
- Software to guide operation
- Data analysis software
- Rechargeable 12-volt battery
- One (1) automotive-grade 77 GHz Radar sensor
- Calibration object with shielded stand (10 dB-m² trihedral)
- Adaptable to customer-supplied sensor
- Durable transport cases. (1 x base, 1 x mast)

Motion Pack

- AB Dynamics pinpoint IMU
- SATEL RTK receiver (Freewave or Futaba receivers available on request)



Example of 360-degree scan



Trihedral Calibration Object

Available Upgrades

- Integration with other DGPS/IMU systems
- Additional sensors
- Custom sensor height adjustments
- Additional calibration objects (e.g., spheres, dihedrals)
- Custom software and data analysis output

