Mobile Mapping System

Road-Scanner C "Compact Edition"

FARO

In cooperation with SITECO

FEATURES

- Compact design, portable, self-calibrating and can be used with any vehicle
- Post-processing software for imagery and point cloud management
- AutoCAD, ArcGIS, Microstation plug-ins
- Road Assets and Pavement Management Systems
- Spherical camera LadyBug 5 (6x30 Mpx)
- High accuracy Inertial Navigation System (INS)
- Detachable FARO Focus^{3D} laser-scanners which can be used as stand-alone 3D scanners without losing calibration

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FARO® COLLABORATES WITH SITECO TO INTRODUCE A MOBILE MAPPING SYSTEM ROAD-SCANNER C

FARO now offers its existing and new cutomers the possibility to have a mobile mapping system from Siteco. Making use of their global sales network, FARO will advocate the Road-Scanner C whereas Siteco will be the main point-of-contact for customers with regards to the sale of the Road-Scanner C, its maintenance and related warranties. The collaboration will enable customers to have access to the trusted technology of Siteco through FARO's credible sales network.

TECHNICAL SPECIFICATIONS

GNSS-IMU Component		Physical and Environmental specs	
Channels	GPS+GLONASS L1/L2	Size	600x600x900 mm
Gyro Bias stability	0.1°-1°/hr	Weight	Appx. 50 kgs
Gyro Bias Offset	0.1°-1°/hr	Operating Temperature	-5°C to 40°C

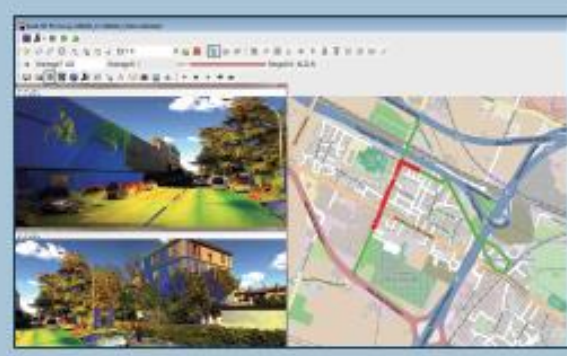
Imagery Components		Accuracies	
Ladybug 5 Spher. camera	6x5 Mpx cameras	Absolute Accuracy	<2 cm with Ground Control Points
Gigaethernet cameras	Up to 7 x 4 Mpx	Relative LIDAR Accuracy	1 to 7 mm

THE MOST DIVERSE SOLUTION IN MOBILE MAPPING

The FARO Focus[S] laser-scanners can be detached from the system and used as stand-alone 3D scanners without losing calibration. Such diversity with price-performance value is nowhere else to be found in the market.

COMPLETE PROJECT PLANNING, EXECUTION AND DATA DELIVERY SOFTWARE PACKAGE

Road-Scanner C is delivered with a powerful ergonomic software suite developed to acquire and edit the project geo-database. The acquisition software allows you to monitor the survey accuracy and the quality of imagery and point cloud.



GENERAL PHYSICAL CHARACTERISTICS

Size	**500 x 520 170mm (body) +800mm LadyBug camera and antenna bar**
Weight	35kg approx. (without Laser Scanners)
Shipping case dimensions	600 x 600 x 600mm
Ambient temperature	5° - 40°C (laser scanner)
Power cable length	5m
Antennas cable length	Up to 10m
Power supply voltage	12V (external supply)
Power consumption	Max 200W
Battery life	When not connected with car alternator apprx. 2.5 hours
Maintenance/Calibration	Annual for Laser Scanners

DATA HANDLING AND CONTROL

Data storage	**Internal 500GB SSD disk included (second disk slot available)**
System Control	Via remote desktop connection (alternative HDMI cable and wireless keyboard and mouse)

LadyBug 5

Image data output	**8, 12, or 16-bit**
Image data format	RAW or JPEG
Sensor	Sony ICX655 CCD x 6,2/3“, 3.45 µm
Resolution	2048 x 2448 (30MP i.e., 6 x 5MP)
Frame rate	10FPS compressed; 5FPS uncompressed
Power consumption	12-24V, 13W via GPIO
Connection	5 Gbit/s, USB 3.0
Environmental protection	IP65

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IMU/GNSS

Position accuracy (absolute)	Typical 20-50mm
Roll pitch accuracy	0.015 deg
True heading	0.025
Temperature	-40°C to +75°C (operational) -55°C to +85°C (storage)

SOFTWARE

CAPTURE SOFTWARE: ROAD SIT-SURVEY
An easy to use software designed to capture and edit the project geo-database.

MISSION MANAGEMENT AND ROAD GEODATABASE
A special ArcGIS plug-in allows you to organize all the data collected in a road geodatabase. The RMS value are displayed in the GIS environment to analyze the location of Ground Control Point Calibration

CALIBRATION by GROUND CONTROL POINTS (GCP)
Sophisticated functions are available for the correction of the trajectories with GCP, ensuring centimeter accuracy even under poor GPS conditions.

FEATURE EXTRACTION – POINT CLOUD RENDERING
A wide range of drawing funtions is provided to produce details maps quickly and efficiently. Some of those are: buffers and sections on a generic plane, snaps to laser points or to existing vector entities, surfaces and edges detection, coloring the points by evelvation, reflectance and real color, etc.

HARDWARE

FARO LASER SCANNERS
The FARO Focus X-series with its compact and lightweight design, improved range and simple, intuitive operation allow fast and aacurate measurements.

INERTIAL NAVIGATION SYSTEMS
The Road-Scanner C can be quipped with a wide range of navigation systems. All models include GPS receiver(s) and antenna(s).

LADYBUG5 SPHERICAL CAMERA
The Ladybug5 spherical imaging system boasts an impressive 30MP resolution covering 90% of a full sphare, a 5Gbit/s USB 3.0 interface with superb image quality and maximum user flexibility.

CONTROL UNIT
Please mention some information

PREREQUISITES
Siteco software license (Road-SIT, Road SIT Survey) can be installed on Windows 8 OS or later versions. The recommended configuration is Intel Corei7 processor with 16/24 GB of RAM.