imajing

imajbox®
MOBILE MAPPING SYSTEM

Mounted on cars, trucks or trains, imajbox® can survey from a few to thousands of kilometers.

Punctual, recurrent or nationwide projects, imajbox® is the perfect tool to survey a network, thus having up-to-date data.

ACCURATE
Proprietary algorithms to process sensors' raw data for the continuous and accurate spatial positioning.

SIMPLE
Independant, all-in-one, standalone and autocalibrated.
No wiring required.

PRODUCTIVE
High speed survey for a large scale data collection.

CONNECTED
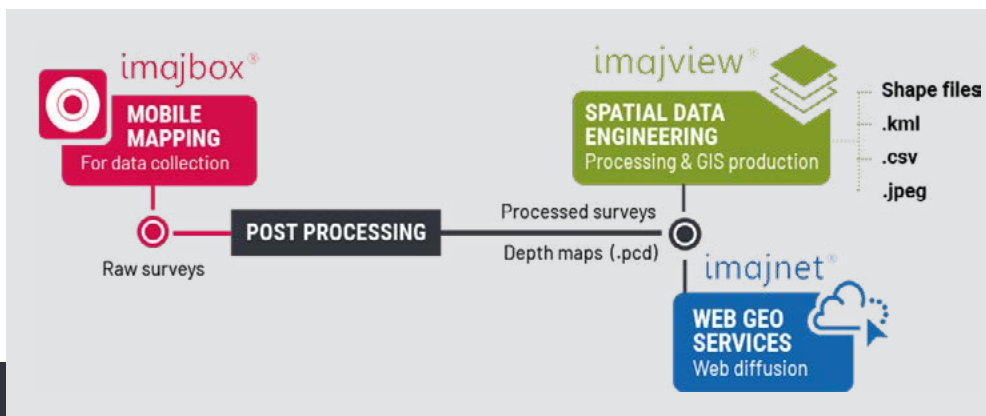Controlled by WiFi and connectors for external sensors integration.

FLEXIBLE
Easily mounted in every orientations with the tripod's succion pads.

A RESPONSE TO MANY ISSUES:

- GIS and mapping
- Engineering studies
- Linear Referencing System
- Maintenance management

- Work control
- Planning and budgeting
- Monitoring
- Asset inventory

imajbox® — MOBILE MAPPING — For data collection
Raw surveys
POST PROCESSING
Processed surveys
Depth maps (.pcd)
imajview® — SPATIAL DATA ENGINEERING — Processing & GIS production
Shape files
.kml
.csv
.jpeg
imajnet® — WEB GEO SERVICES — Web diffusion

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INERTIAL MOVEMENT UNIT (IMU)

DX3

Gyroscopes:
Dynamic range: ± 280°/s
In-run bias stability: 12°/hr
Angular random walk: 0.56/√hr

Accelerometers:
Dynamic range: ± 5g
In-run bias stability: 0,25mg
Velocity random walk: 0.073m/sec/√hr

DX4

Gyroscopes:
Dynamic range: ± 480°/s
In-run bias stability: 6.25°/hr
Angular random walk: 0.3/√hr

Accelerometers:
Dynamic range: ± 18g
In-run bias stability: 0,1mg
Velocity random walk: 0.029m/sec/√hr

PACKAGE

- 1 unit delivered in a small fly case
- 3 succion pads
- 1 USB Pendrive 128GB
- 1 external patch antenna (L1/L2)
- Security strap
- Cigarette lighter power supply cable
- AC/DC converter 110/240V 12V 3A

SPECIFICATIONS		3S	3SX+	3TX+
Image sensor Single CMOS Global Shutter 8,9MP		●	●	●
Resolution 4096 x 2160 pixels		●	●	● *(Cropped for high speed: 2200 x 2160)*
HFOV 100°		●	●	●
Maximum frame rate		10 fps	10 fps	17 fps *(high speed mode)*
IMU 6 axis (details on the left)		DX3	DX4	DX4
Real time GNSS (NTRIP corrections)				
Standalone		●	●	●
SBAS				●
DGNSS			●	●
PPP				●
RTK			●	●
Post Processed GNSS (RINEX corrections)				
Standalone		●		●
SBAS		●		●
DGNSS		●		●
PPK				●
GNSS tracked frequencies				
GPS		L1	L1, L2	L1, L2, L5
GLONASS		L1	L1, L2	L1, L2, L3
Galileo		E1	E1, E5	E1, E5a, E5b, AltBoc
BeiDou			B1, B2	B1, B2
SBAS				EGNOS, WAAS, GAGAN, MSAS, SDCM (L1, L5)
QZSS				L1, L2, L5
L-Band (Terrastar)				●
Final extracted data absolute accuracy				
X, Y		< 0,5m DRMS *(with DGNSS)*	< 0,1m CEP *(with RTK)*	< 0,1m DRMS *(with PPK)*
Z		< 2m	< 0,2m	< 0,1m
Internal SSD (512 GB optional)		128GB	128GB	128GB
Application		Road	Road	Road / Rail
Maximum speed		180 km / h	180 km / h	306 km / h
Connectivity				
USB 3 / Ethernet / Wi-Fi host (for web remote control)		●	●	●
Wi-Fi client (for corrections)			●	●

HARDWARE

Operational limits: -10°C to +40°C
Protection level: IP 65
Dimensions: 175 x 165 x 145
Weight: 2 kgs
Internal battery: 3h
Power supply: 12 V / A

SOFTWARE

**imajbox® is delivered with
Post processing software for Windows X64:**

imajing browser
imajing 3D Pro
imajing tight hybrid algorithms *(only for 3S)*
imajing InertialVision fusion algorithms *(only for 3SX+ and 3TX+)*
Kinematic post processing module *(only for 3TX+)*