



## MOBILE MAPPING

**Portable mobile mapping system designed to survey linear infrastructures from any vehicle.**

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



### **Accurate**

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



### **Simple**

Independent, stand-alone and auto calibrated.  
No wiring required.



### **Productive**

Survey at high speeds for large scale data collection.



### **Connected**

Controlled by Wi-Fi and connectors for external sensor integration.



### **Adjustable**

Easy to mount and adjust in all directions without having to calibrate.



## imajbox® 3SX+ FOR GIS ROAD MAPPING.

The imajbox® is the perfect tool to collect mass geo referenced up-to-date data along transportation and utilities networks.

### **A solution to many problems:**

- GIS and mapping
- Infrastructure assessment
- Engineering studies
- Linear Referencing System
- Maintenance management
- Work control
- Security
- Monitoring

## GNSS RECEIVER

**184 channels for simultaneous tracking of all visible satellites**

**GPS:** L1C/A, L2C

**GLONASS:** L1OF, L2OF

**Galileo:** E1, E5b,

**BeiDou:** B1, B2

### Supported real time modes:

Standalone, dGNSS\*, RTK\*

MODE	HORIZONTAL ACCURACY (CEP)	VERTICAL ACCURACY (CEP)
Standalone	1,5m	3m
DGNSS	0,7m	1,5m
RTK	1cm+1pmm	1cm+1pmm

*\*requires streaming of NTRIP frames for base stations corrections via WiFi.*

### Time to first fix:

Cold start < 30s

Warm start < 2s

## ANTENNA

### Integrated RTK grade L1/L2 antenna

GPS/GLONASS/GALILEO/BEIDOU

### Connector for external antenna (SMA)

Auto-switch to an external antenna

### Patch antenna for external use:

GPS/GLONASS L1/L2 patch antenna

### Interface for lever arm input

## IMU

DX4 inertial movement unit 6 axis

### Gyroscopes:

Dynamic range:  $\pm 480^\circ/s$

In-run bias stability:  $6.25^\circ/hr$

Angular random walk:  $0.3^\circ/\sqrt{hr}$

### Accelerometers:

Dynamic range:  $\pm 18g$

In-run bias stability:  $0,1mg$

Velocity random walk:  $0.029m/sec/\sqrt{hr}$

## IMAGE SENSOR

### Sensor

Single CMOS Global Shutter 8,9MP

### Resolution

4096x2160 pixels

### Auto-trigger

Inter distance of image acquisition configurable (from 0,5m to 10m)

### Maximum Frame rate

10fps

### Ultra-fast auto-exposure

3 zones presets

### Optimized debayering

## OPTICS

### Fixed focus multi-lens

### Deep depth of field

Sharp from 0,5 to 100m from camera

### HFoV

100°

## STORAGE

### Internal SSD

128 GB

### Support for real time external storage via USB3 (Pendrive, HDD, SSD)

### Data management interface

for copying from internal SSD to USB

### Support for Ethernet

SAMBA share for accessing internal SSD directly

## CONNECTIVITY

USB 3

Ethernet

Wi-Fi host (for web remote control)

Wi-Fi client (for corrections)

## SOFTWARE

### imajbox® is delivered with Post processing software for Windows x64:

imaging browser

imaging 3D Pro

imaging InertialVision fusion algorithms

## OPERATIONAL LIMITS

### Survey speed

0 to 180 km/h

### Temperature

-10°C to 50°C

### Protection level

IP 65

## HARDWARE

### Dimensions

Height: 175 mm

Length: 165 mm

Width: 145 mm

### Weight

3 kg

### Power supply

12V / 3A

Internal battery for 3h standalone survey

### Package

1 unit delivered in a small fly case

3 suction cups

1 USB Pendrive 128GB

1 external patch antenna (L1/L2)

Security strap

Cigarette lighter power supply cable

AC/DC converter 110/240V 12V 3A

imajbox®

DATA COLLECTION

Raw surveys

POST PROCESSING

Processed surveys

IMAGING 3D PRO

Point clouds (.pcd, .laz)  
Depth maps

imajview®

GIS PRODUCTION

Shape files  
.kml  
.csv  
.jpeg

imajnet®

WEB DIFFUSION