imajbox® 3

IMAJBOX® 3S

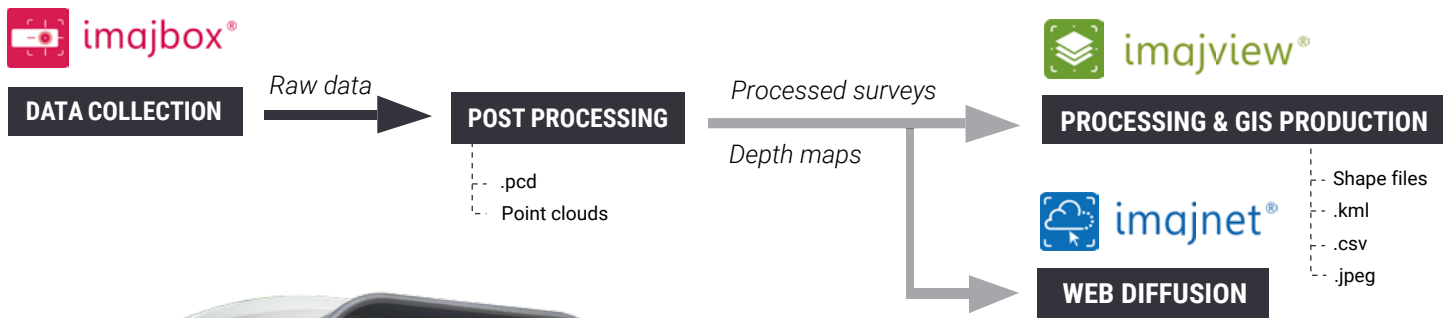### FOR GIS ROAD MAPPING

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

A versatile tool

Mounted on cars or trucks, 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.

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imajbox®

DATA COLLECTION → *Raw data* → **POST PROCESSING**
- .pcd
- Point clouds

Processed surveys
Depth maps

imajview®
PROCESSING & GIS PRODUCTION

imajnet®
WEB DIFFUSION

- Shape files
- .kml
- .csv
- .jpeg

A response to many issues:

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

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 large scale data collection.

CONNECTED
Controlled by WiFi and connectors for external sensors integration.

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

SOKCON *Services*   **imajing**

imajbox® 3S

GNSS RECEIVER

- **32 channels for simultaneous tracking of all visible satellites**

  GPS: L1
  GLONASS: L1
  Galileo: E1
  SBAS: EGNOS, WAAS, GAGAN, MSAS

- **Supported real time modes:**
  Standalone, SBAS

- **Supported post processed modes:**
  dGNSS (GPS+GLONASS)
  EMS (EGNOS SBAS in post process)

MODE	HORIZONTAL ACCURACY
Standalone	2m
SBAS	1m
dGNSS	0,5m

- **Time to first fix:**
  Cold start < 45s
  Warm start < 20s

ANTENNA

- **Integrated**
  GPS/GLONASS/GALILEO antenna

- **Connector for external antenna (SMA)**
  Auto-switch to an external antenna
  (50ohms load)

- **Patch antenna for external use:**
  GPS/GLONASS L1 patch antenna

- **Interface for lever arm input**

IMU

DX3 inertial mouvement unit 6 axis

- **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

IMAGE SENSOR

- **Sensor**
  Single CMOS Global Shutter 8,9MP

- **Resolution**
  Standard: 4096x2160 pixels

- **Auto-trigger**
  Inter distance of image acquisition
  configurable (from 0,5m to 10m).

- **Maximum Frame rate**
  10fps (full resolution)

- **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:**

  imajing browser

  imajing 3D Pro

  imajing tight hybrid algorithms

OPERATIONAL LIMITS

- **Survey speed**
  0 to 130 km/h

- **Temperature**
  -10°C to 40°C

HARDWARE

- **Dimensions**
  Height: 175 mm
  Length: 165 mm
  Width: 145 mm

- **Weight**
  2 kg

- **Power supply**
  12V / 3A
  Internal battery for 3h standalone survey

- **Package**

  1 unit delivered in a small fly case

  3 suction pads

  1 USB Pendrive 128GB

  1 external patch antenna

  Security strap

  Cigarette lighter power supply cable

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