



imajbox®

# Mobile mapping system

ACCURACY MADE EASY

GIS and mapping

Infrastructure assessment

Engineering studies

Maintenance management



DESIGNED FOR DATA COLLECTION ALONG TRANSPORTATION AND LINEAR NETWORKS

## ▶ ACCURACY

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

## ▶ SIMPLICITY

Compact, portable, all-in-one, standalone and autocalibrated. No wiring required.

## ▶ PRODUCTIVITY

High speed survey for a large scale data collection.

## ▶ FLEXIBILITY

Controlled by WiFi and connectors for external sensors integration. Adjustable on cars, trucks, trains or boats.

# INERTIAL MOVEMENT UNIT (IMU)

## DX3

### Gyroscopes:

Dynamic range:  $\pm 280^\circ/s$   
 In-run bias stability:  $12^\circ/hr$   
 Angular random walk:  $0.56/\sqrt{hr}$

### Accelerometers:

Dynamic range:  $\pm 5g$   
 In-run bias stability:  $0,25mg$   
 Velocity random walk:  $0.073m/sec/\sqrt{hr}$

## DX4

### Gyroscopes:

Dynamic range:  $\pm 480^\circ/s$   
 In-run bias stability:  $6.25^\circ/hr$   
 Angular random walk:  $0.3/\sqrt{hr}$

### Accelerometers:

Dynamic range:  $\pm 18g$   
 In-run bias stability:  $0,1mg$   
 Velocity random walk:  $0.029m/sec/\sqrt{hr}$

## ALL-INCLUDED PACKAGE

- Delivered in a fly case including the unit, the car roof mounting system, external power supply cables and post-processing softwares.



SPECIFICATIONS	3SX	3SX+	3TX+	360	360 HD	
<b>CMOS global shutter</b>	8,9 MPX			30MPX	72MPX	
<b>Resolution</b> <small>*(Cropped for high speed: 2816x2160)</small>	4096 x 2160 pixels	4096 x 2160* pixels	8192x4096 pixels	12288x6144 pixels		
<b>HFOV</b>	100°			360°		
<b>Maximum frame rate</b> (full resolution) <small>*High speed mode</small>	10fps		17fps*	10fps		
<b>IMU</b> 6 axis (details on the left)	DX3	DX4				
<b>Real time GNSS</b> (NTRIP corrections)						
Standalone	●			●		
SBAS				●		
DGNSS	●			●		
RTK	●			●		
<b>Post Processed GNSS</b> (RINEX corrections)				●		
<b>GNSS tracked frequencies</b>						
GPS	L1C/A, L2C		L1, L2, L5			
GLONASS	L10F, L20F		L1, L2, L3			
Galileo	E1, E5b		E1, E5a, E5b, AltBoc			
BeiDou	B1, B2		B1, B2			
SBAS			EGNOS, WAAS, GAGAN, MSAS, SDCM (L1, L5)			
QZSS	L1C/A, L2C		L1, L2, L5			
<b>Positioning platform</b> (DRMS)						
Accuracy X, Y	0,1m	0,05m	0,01m			
Accuracy Z	0,3m	0,2m	0,02m			
<b>Internal SSD</b>	128GB		512GB	1TB	2TB	
<b>Application</b>	Road		Road / Rail			
<b>Maximum speed</b>	180 km/h		300 km/h	130 km/h		
<b>HARDWARE</b>	<b>Housing</b>	Plastic	Aluminium			
	<b>Weight</b>	2 kg	3 kg	11 kg	14 kg	
	<b>Size</b>	17,5x16,5x14,5 cm		36x36x52cm	36x36x54cm	
	<b>Connectivity</b>	USB 3 / Ethernet / Wi-Fi host (for web remote control) Wi-Fi client (for corrections)				
	<b>Operational limits</b>	-10°C to +40°C	-10°C to +50°C			
	<b>Protection level</b>	IP 65				
	<b>Internal battery</b>	3 hours			2 hours	
	<b>Power supply</b>	12 V / 3A				
<b>SOFTWARE</b>	<b>Desktop software</b> (not included)	imajview® 4 & 5			imajview®5	
	<b>Included softwares</b>					
	imajing browser	●	●	●	●	●
	Kinematic post processing module (PPK)			●	optional	
	imajing InertialVision fusion algorithms	●	●	●	●	●
imajing 3D Pro	●	●	●	●	●	