3Dlaser mapping

ROBIN

3-IN-1 MOBILE MAPPING SYSTEM

WALK **DRIVE** **FLY**

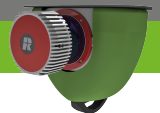**READY TO GO IN UNDER 5 MINUTES**

ROBIN SYSTEM PACKAGE

HARDWARE

- High accuracy laser scanner
- 12 MP camera (Drive)
- 18.4 MP camera (Walk/Fly)
- 2 GNSS antennas
- GIS grade IMU navigation system
- Touch screen control unit
- 3 mounting systems (Walk/Drive/Fly)

SOFTWARE

- Capture software
- Post-Processing software package

TRANING

- Capture and calibration training
- Full processing workflow training

SUPPORT

- 1 year software maintenance and support
- 1 year hardware warranty and support

TECHNICAL SPECIFICATION

ROBIN

System Weight (Walk/Drive)	< 10 kg
System Weight (Fly)	< 6 kg
Scanner Max. Range (Slow Speed*/Refl. 60%) *Effective Measurement Rate 50kHz- Slow speed	920m (max. 350m AGL)
Scanner Max. Range (High Speed*/Refl. 60%) *Effective Measurement Rate 500kHz- High speed	300m (max. 110m AGL)
Scanning Speed	200 lines/second
Field of View	330 degrees
Max Effective Measurement Rate	500,000 meas./sec
INS Position	< 0.05 m
IMU	0.015 deg
INS Positional Error	0.02 m
Antenna	2 x GNSS Antennas
Initialisation Time (static and dynamic)	5 minutes
Mounting	3-in-1 carbon-fibre mounting system

MEDIUM RESOLUTION CAMERA

Camera resolution	4240 x 2824 (12 MPixels)
Frame rate	5 frames per second
Sensor size	1 inch
Pixel size	3.1 µm
Sensor type	CCD
Lens Field of View	83.5° x 66.7°

HIGH RESOLUTION CAMERA

Camera resolution (Walk/Fly)	5232 x 3488 (18.4 MPixels)
Frame Rate (Walk/ Fly)	1 frame per second
Sensor size	13.2 x 8.8 mm
Pixel size	2.52 µm
Sensor type	CX-Format CMOS
Lens Field of View	65° x 45°

VERSIONS AND ADD-ONS

ROBIN VERSIONS

ROBIN
Multi-purpose, all-round system

ROBIN-WINGS
Long range laser scanner optimised for airborne applications

ROBIN-PRECISION
High accuracy laser scanner optimised for shorter range, more detailed data capture

APPLICATION SOFTWARE

TerraSolid software

OrbitGT software

MOUNTING ADD-ON

Helipod- STC certified for ROBIN – WINGS operations

INDOOR ADD-ON

Indoor Mapping – SLAM system – easy to add on existing ROBIN and ROBIN-PRECISION system

VERSION COMPARISON

	ROBIN	ROBIN-WINGS	ROBIN-PRECISION
Walk	YES	NO	YES
Drive	YES	NO	YES
Fly	YES	YES	YES
Scanner Max. Range (Slow Speed*/Refl. 60%)	920m (max. 350m AGL) *Effective Measurement Rate 50kHz	1,350m (max. 530m AGL) *Effective Measurement Rate 50kHz	400m *Effective Measurement Rate 50kHz
Scanner Max. Range (High Speed*/Refl. 60%)	300m (max. 110m AGL) *Effective Measurement Rate 500kHz	370m (max. 140m AGL) *Effective Measurement Rate 750kHz	235m *Effective Measurement Rate 1,000kHz
Scanner Precision	5 mm	10 mm	3 mm
Scanning Speed	200 lines/second	200 lines/second	250 lines/second
Field of View	330°	330°	360°
Max. Effective Measurement Rate	500,000 meas./sec	750,000 meas./sec	1,000,000 meas./sec

AVERAGE POINT CLOUD DENSITY (points pr sqm)

	ROBIN	ROBIN-WINGS	ROBIN-PRECISION
Walk @ 5Km/hr @ 20m range	3000	4500	6000
Drive @ 50Km/hr @ 5m range	1200	1800	2400
Fly @ 30Km/hr @ 50m range	200	300	400

INTERESTED? Contact one of our offices to find out more or arrange a demo.