Trimble MX9

MOBILE MAPPING SOLUTION

KEY FEATURES

- Very high point cloud density with complementary immersive imagery
- State of the art Trimble® GNSS and Inertial technology
- Lightest and most compact premium mobile mapping system
- Simple installation and browser-based operation from any smart device
- Compatible with existing Trimble software and workflows
- Enhanced remote support capabilities
- Supported by Trimble Business Center Mobile Mapping for efficient data processing
- Trimble MX software for feature extraction workflows and data publishing

Learn more:
geospatial.trimble.com/MX9

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MX9 SYSTEM

Scan speed	500 scans/sec
Number of laser scanners	2
Laser positions	Adjustable in 3 horizontal and 3 vertical positions

MX9 LASER SCANNER

Laser class	1, eye-safe					
EFFECTIVE MEASUREMENT RATE[1]	300 kHz	500 kHz	1000 kHz	1250 kHz	1500 kHz	1800 kHz
Maximum range target reflectivity > 80%[2]	475 m	370 m	235 m			
Maximum range target reflectivity > 10%[2]	170 m	130 m	85 m			
Maximum number of targets per pulse	up to 15	up to 15	up to 9	up to 7	up to 5	up to 4
Minimum range	1 m @ PRR ≥ 1 MHz, 1.2 m @ PRR < 1 MHz					
Accuracy[3]/precision[4]	5 mm/3 mm					
Field of view	360° "full circle"					

EMBEDDED TRIMBLE GNSS-INERTIAL SYSTEM

IMU-Options	AP60
ACCURACY—NO GNSS OUTAGES (POST PROCESSED)[5]	
X, Y position (m)	0.020
Z position (m)	0.050
Velocity (m/s)	0.005
Roll and pitch (deg)	0.005
Heading (deg)[6]	0.015
ACCURACY—60 SECOND GNSS OUTAGE (POST PROCESSED)[5]	
X, Y Position (m)	0.100
Z Position (m)	0.070
Roll and pitch (deg)	0.005
Heading (deg)[6]	0.015
ACCESSORIES	
GAMS	Yes, optional
DMI[5,7]	Yes, optional

CAMERAS

SPHERICAL CAMERA				
Camera type	No	Mounting	FoV	Focal length
Spherical camera, 30 MP (6 x 5 MP)	1	Fixed	90 % of full sphere	4.4 mm
Capture modes	By distance or by time at 10 fps max			
PLANAR CAMERAS				
Camera type	No	Mounting	FoV	Focal length
12 MP side facing camera	2	Adjustable (in horizontal and vertical positions)	H: 47.6° V: 35.9°	16.0 mm
12 MP backward/ downward facing camera	1	Fixed	H: 82.9° V: 65.9°	8.0 mm
Capture modes	By distance or by time at 9 fps max			

ELECTRICAL DATA

Power supply input voltage	12 V-DC (12 V–16 V)
POWER CONSUMPTION	
Max	350 W
Typical	280 W

SYSTEM COMPONENTS

Sensor unit	Included
Control unit	Included
Power unit	Included
Roof rack	Included, standard cross bars not included
Transport box	Included
Field software	TMI, browser-based, no installation necessary
Cable, battery to power unit	5 m
Cable, power unit to control unit	3 m
Cable, control unit to sensor unit	5 m
Data storage	1 set (2 x 2 TBytes SSD, removable)[8]
Control interface	Tablet or Notebook, Wi-Fi or LAN cable, byod

3RD PARTY HARDWARE INTEGRATION OPTIONS

Synchronization output at sensor unit	1 (NMEA + PPS)

ENVIRONMENTAL CHARACTERISTICS

Maximum vehicle speed for data acquisition	110 km/h (68 mph)
IP rating	IP64 (sensor unit)
Operating temperature	0 °C to +40 °C
Storage temperature	-20 °C to +50 °C
Relative humidity (operating)	20 % to 80 %
Relative humidity (storage)	20 % to 95 %

PHYSICAL CHARACTERISTICS

Dimensions sensor unit	0.62 m x 0.55 m x 0.62 m
Weight sensor unit	37 kg
Dimensions roof rack	1.03 m x 0.48 m x 0.28 m
Weight roof rack	18 kg

1 Rounded values, selectable by measurement program.
2 Typical values for average conditions.
3 Accuracy is the degree of conformity of a measured quantity to its actual (true) value.
4 Precision is the degree to which further measurements show the same results.
5 With DMI option.
6 With GAMS option, 2 m baseline.
7 One sigma values, with DMI option, post-processed using base station data. Typical performance. Actual results are dependent upon satellite configuration, atmospheric conditions and other environmental effects.
8 4 TBytes SSD is available as an accessory.

Specifications subject to change without notice.

Contact your local Trimble Authorized Distribution Partner for more information

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