

eME10

GNSS INTELLIGENT EXCAVATOR GUIDANCE SYSTEM

The eSurvey eME10 is designed with high accuracy in mind and consumes less time by guiding excavator operations. It uses GNSS real-time dynamic positioning technology to obtain the bucket's real-time and accurate 3D position information by reading various tilt sensors installed on the excavator. The eME10 features intuitive, easy-to-learn software that runs on the Android operating system. The state-of-the-art hardware and software help operators of all skill levels work faster and more efficiently than ever, especially in complex areas. To sum up, you can get more in less time.



Machine Control

Centimeter-level Accuracy

Satisfy all your excavator construction needs; the real-time positioning accuracy can be up to ± 3 cm.

Getting More in Less Time

Work faster and more efficiently by guiding excavator operations, including improving operation efficiency, reducing auxiliary measurement operators, improving the accuracy of operation results, and reducing repeated data checks.

10.1 Inch Screen

The 10.1-inch screen with 1280 * 800 resolution makes the tablet a high-fidelity device. 750 cd/m² brightness makes it sunlight viewable.

Rugged Hardware

Apply the eME10 even under harsh environmental conditions (like dust, mud, rain, extreme heat, and cold) for many years, with the rugged design of the display, GNSS receiver, positioning antenna, heading antenna, and tilt sensors.

Intuitive Software: Easy-to-use

View the 3D model in real-time for reference with the optimized interface full of colorful graphics and natural interactions for ease of use and productivity.



Website



Social media

Product Specification

eME10

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Display	
Processor	ARM®-A53 processor with 1.8 GHz
GPU	AdrenoTM506
OS	Android 7.0
RAM	2 GB DDR3
ROM	16 GB EMMC
SIM card	Support
Screen size	10.1 inch TFT LCD
Resolution	1280 x 800
Brightness	750 cd/m ²
Touch panel	Capacitive
Input voltage	9 - 32 V dc
Dimension	271.9 mm x 194.6 mm x 41.5 mm
Weight	1.7 kg
Operating temperature	-20°C - +70°C
Storage temperature	-30°C - +80°C
Water/dust proof	IP65
Wi-Fi	802.11 b/g/n
Bluetooth	Support
USB	USB 2.0 x 1
CAN	CAN BUS x 1
COM	RS232 x 1

Sensor	
Absolute accuracy	±0.01° rms @25°C
Resolution	0.005°
Signal output	CAN2.0B
Water/dust proof	IP67
MTBF	≥50000h
Input voltage	9-36V

MR1 GNSS Receiver	
Channels	1100
Satellites tracking	<ul style="list-style-type: none"> ■ GPS: L1C/A, L1C, L1P, L2C, L2P, L5 ■ BDS: B1I, B2I, B3I, B1C, B2a, B2b, ACEBOC ■ GLONASS: G1, G2, G3 ■ GALILEO: E1, E5a, E5b, E5AltBOC, E6 ■ QZSS: L1C/A, L1C, L2C, L5, LEX ■ SBAS ■ L-Band
Warm start	60s
Cold start	10s
Frequency	5 Hz standard, up to 20 Hz
Positioning accuracy	<ul style="list-style-type: none"> ■ RTK: H: 8 mm + 1 ppm; V: 15 mm + 2 ppm ■ DGNS: H: 0.3 m; V: 0.6 m ■ Single: H: 1.2 m; V: 2.5 m ■ SBAS: H: 0.3 m; V: 0.6 m
Heading accuracy	<ul style="list-style-type: none"> ■ 0.16° rms @ 0.5 m ■ 0.08° rms @ 1.0 m ■ 0.04° rms @ 2.0 m ■ 0.02° rms @ 5.0 m
Pitch accuracy	0.16° rms @1.0m
Roll accuracy	0.5°
Differential mode	RTCM3, RTCM3.2, CMR, CMR+, ROX
Internal radio	RX, 410 - 470 MHz
Port	<ul style="list-style-type: none"> ■ RS232 x 2 ■ CAN x 2
Wi-Fi	2.4G Wi-Fi, 802.11 b/g/n
Bluetooth	Support
Input voltage	7-36 V dc
Dimension	170 mm x 70 mm x 40 mm
Water/dust proof	IP67
Vibration	ISO16750
Operating temperature	-40°C - +85°C
Storage temperature	-40°C - +85°C
Humidity	95%