

eME10



GNSS INTELLIGENT EXCAVATOR GUIDANCE SYSTEM

■ Centimeter-level Accuracy

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

■ 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.

■ 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.

■ 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.

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 real-time and accurate 3D position information of the bucket by reading various tilt sensors installed on the excavator. The eME10 features intuitive, easy-to-learn software that runs on Android operating system. The state-of-the-art hardware and software help operators of all skill levels work faster and more efficiently than ever before, especially in the complex areas.

To sum up, you can get more in less time.

Specification

Display	
Processor	ARM®-A53 processor with 1.8 GHz
GPU	AdrenoTM506
OS	Android 7.0 9.0 (optional)
RAM	2 GB DRAM
ROM	16 GB EMMC
SD	Micro SD card
Screen size	10.1 inch TFT LCD
Resolution	1280 x 800
Brightness	1000 cd/m ²
Touch panel	Capacitive
Input voltage	9 - 36 V dc
Dimension	271.9 mm x 194.6 mm x 46.5 mm
Weight	1.54 kg
Operating temperature	-20°C - +70°C
Storage temperature	-30°C - +80°C
Water/dust proof	IP65
Wi-Fi	2.4G / 5G Wi-Fi, 802.11 a/b/g/n/ac
Bluetooth	BT2.1+EDR / 4.0 / 4.1 LE / 4.2 BLE
USB	USB 2.0 x 1
CAN	CAN BUS x 2
COM	RS232 x 2
Video interface	CVBS video input x 2

MR1 GNSS Receiver	
Channels	372
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
Frequency	20 Hz
Positioning accuracy	<ul style="list-style-type: none"> ■ RTK: H: 8 mm + 1 ppm; V: 20 mm + 2 ppm ■ DGNSS: 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"> ■ < 0.09° rms @ 1.0 m ■ < 0.04° rms @ 2.0 m ■ < 0.02° rms @ 5.0 m ■ < 0.01° rms @ 10 m
Communication protocol	NMEA2000, NMEA0183
Differential mode	RTCM3, RTCM3.2, CMR, CMR+, ROX
Internal radio frequency	410 - 470 MHz
Port	<ul style="list-style-type: none"> ■ RS232 x 2 ■ CAN x 2 ■ TNC x 2
Wi-Fi	2.4G Wi-Fi, 802.11 b/g/n
Bluetooth	EDR / 4.0 / 4.1 LE / 4.2 BLE
Input voltage	7-36 V dc
Dimension	170 mm x 70 mm x 40 mm
Vibration	ISO16750
Operating temperature	-40°C - +70°C
Storage temperature	-40°C - +85°C
Humidity	95%