

EAS502

MULTI-FUNCTIONAL AUTO-STEERING SYSTEM

Independently developed by ESURVEY, this multi-functional auto-steering system integrates a 12-inch high-performance display, EW3 electric steering wheel, and MC6A intelligent control unit. It enables semi-automatic operation for agricultural machinery, reducing operator fatigue and improving work efficiency. With high-precision positioning and steering control, it ensures consistent path execution for seeding, spraying, and harvesting, enhancing crop yield and reducing resource waste.



Agriculture

Versatile Compatibility

Suitable for tractors, transplanters, sprayers, harvesters, and construction machinery.

Easy Operation

12-inch high-brightness touch display with Android system, supporting intuitive configuration and real-time monitoring.

High Precision

Combined with MC6A's RTK positioning accuracy (0.8cm+1ppm horizontal) and EW3's precise steering, ensuring stable operation.

Flexible Communication

Integrated 4G, Wi-Fi, and radio modules for stable data transmission and remote control.

Durable & Reliable

Industrial-grade components with wide temperature resistance and IP65/IP67 protection, adapting to harsh outdoor environments.



Website & Social media

Specification

System Specifications	
System	
Accuracy	Dry land: 2cm(\leq 12 km/h) Paddy land: 5 cm(\leq 12 km/h)
Line acquisition distance	< 6 m
Vehicle velocity range	0.1 - 30 km/h
Multiple GNSS & PPP Modes	B2B-PPP, HAS-PPP, PPP-AR, PPP-RTK, RTK, SBAS
NMEA output	GGA, GSV, VTG, GSA, ZDA, RMC, GST
ISOBUS	VT, TC-BAS, TC-SC, TC-GEO, AUX-N
Steer Ready	CANBUS, PWM
EW3 Electric Steering Wheel Controller	
Motor	
Working voltage	DC9-32V (compatible with DC12/24V vehicle systems)
Rated output torque	5.0N·m (DC12V @30RPM)
Maximum rotation speed	100 RPM
Response delay	< 0.4s
Frequency response	10Hz (full range) 20Hz (straight-line driving)
Working Environment	
Operating temperature	-40°C - +70°C
Storage temperature	-40°C - +85°C
Mechanical shock	EP455/5.14.1
Vibration characteristics	EP455/5.15.1& 5.15.2
Water/dust proof	IP65 (GB/T 4208-2008)
Mechanical Specification	
Motor dimension	2120*182*67mm
Steering wheel size	Ø400*92mm
Weight	\leq 4.5Kg (including steering wheel)
ST30E 12.1-inch Display	
System	
Processor	MT8768, 8-core @2.0GHz
OS	Android 10
RAM	4GB LPDDR4X
ROM	32GB eMMC
Screen	
Size	12.1-inch LCD
Resolution	1280 x 800
Brightness	750 nits
Touch panel	Capacitive touch screen, multi-point anti-glare
Power Supply	
Input voltage	9-36V DC (with overvoltage, undervoltage, reverse connection protection)
Physical Specification	
Humidity	0% ~ 90% RH (non-condensing)
Operating temperature	-20°C - +70°C
Storage temperature	-30°C - +80°C
Water/dust proof	IP67
MC6A Intelligent Control Unit	
GNSS Performance	
Satellites tracked	<ul style="list-style-type: none"> ■ GPS: L1C/A/L2P(Y)/L2C/L5 ■ BDS: B1I/B2I/B3I ■ GLONASS: L1/L2 ■ QZSS: L1/L2/L5
Update rate	20Hz (standard)
Positioning accuracy (RTK)	<ul style="list-style-type: none"> ■ Horizontal: 0.8cm+1ppm ■ Vertical: 1.5cm+1ppm
Heading accuracy	0.1° rms @1.0m baseline
Re-acquisition time	\leq 5s
Communication	
Wi-Fi	Ai-M62-CBS
4G	<ul style="list-style-type: none"> LTE FDD: B1/B2/B3/B4/B5/B7/B8/B18/B19/B20/B25/B26/B28; LTE TDD: B34/38/B39/B40/B41; GSM: B2/B3/B5/B8
Radio	<ul style="list-style-type: none"> Frequency range: 410~470MHz (standard) 220~230MHz (optional) 870~910MHz (optional)
Interfaces	14PIN (RS232/CAN x2) 2 x TNC (radio + GNSS)
Power Supply	
Input voltage	9-36V DC (with overvoltage, undervoltage, reverse connection protection)
Physical Specification	
Dimension	161mm x 160mm x 59mm
Material	Aluminum alloy + engineering plastic
Weight	\sim 0.97kg \pm 20g
Working Environment	
Operating temperature	-30°C - +70°C
Storage temperature	-40°C - +85°C
Humidity	95% RH (non-condensing)
Water/dust proof	IP67