Ultrasonic distance sensors

Ultrasonic Obstacle Sensor for Lawn-Mowing Robots, IP67

Model A25-V1.0

Sealed IP67 ultrasonic obstacle-avoidance sensor for lawn-mowing robots that filters grass interference, with a 3 cm blind zone and UART output.



Range	Output
3-200 cm	UART / UART controlled
Protection	**Supply voltage**
IP67	DC 3.3–12V

Features

- Grass-interference filtering lawn mode
- Transducer potted with housing, rain-wash proof
- Three selectable range levels
- DC 3.3–12V supply
- Average current 10 mA

Applications

Lawn-mowing robots

Specifications

Operating voltage	DC 3.3–12V
Standby current	UART auto 0uA / UART controlled 6uA
Average current	10 mA
Blind zone	3cm (data stable within 1-3cm)
Flat-object measuring range	3–200 (3 range levels selectable by command: 50cm, 150cm, 200cm)
Output	UART serial (controlled, auto)

Beam angle

Reference angle, plane mode, horizontal	40–60°
Reference angle, plane mode, vertical	80–110°
Reference angle, lawn mode, horizontal	20–40°
Reference angle, lawn mode, vertical	45–75°
IP rating	IP67

Wiring	
Pin 1	Red
Pin 2	Black
Pin 3	Yellow
Pin 4	White
Connector	HY2.0-4Y white (with latch)
Cable specification	Black PVC 2464 26AWG, four-core (yellow, white, red, black), unshielded, OD ø4.0mm

Dimensions	
Cable length	300±20 mm
Housing length	32±0.5 mm
Housing step	5±0.2 mm
Housing height (side view)	41±0.5 mm
Body height (side view)	39±0.3 mm
Housing depth step	16.5±0.2 mm
Overall depth	18.3±0.3 mm
Front width, upper	22±0.3 mm
Front width, inner	20±0.3 mm
Transducer spacing	19±0.2 mm
Front inner span	30±0.2 mm
Overall width (with ears)	38.5±0.3 mm
Mounting holes	2-Ø3.2 mm
Operating voltage	3.3-12.0 V
Output	UART / UART controlled
Measuring range	3-200 cm

Ordering and support

Pricing, samples, lead time and custom versions: dwinsales@163.com, +86 181 0280 8901.

Guangzhou Dwin Technology Co., Ltd., 4th Floor, Building 2, No. 4 Xingye Road, Xiaowu Second Industrial Zone, Dongyong Town, Nansha District, Guangzhou, China. Specifications are typical values and may change without notice; confirm critical values with DWIN before design-in. Revision 2026-11.