Ultrasonic distance sensors

Ultrasonic Distance Sensor, Closed Waterproof Probe on Cable

Model A19-V1.0

Ultrasonic ranging module with a closed waterproof transceiver probe on a cable, 28-450 cm range, 28 cm blind zone and ±(1 cm + 0.3% of distance) accuracy.



Range	Accuracy
28–450 cm	±(1+S*0.3%) cm
Output	**Blind zone**
PWM	28 cm

Features

- Closed integrated probe with lead wire
- Dust and water resistant
- UART, PWM and switch outputs
- Reference angle ≈60°
- Standby current ≤10 uA

Specifications

PWM (A19NY?W)

Operating voltage	3.3–5 V
Standby current	≤10 uA
Average current	≤8 mA
Blind zone	28 cm
Object measuring range	28–450 cm
Output	PWM
Working cycle	Controlled
Response time	≤9 ms
Reference angle	≈60°
Accuracy	±(1+S*0.3%) cm
Temperature compensation	Compensated

UART (A19NYUW)	
Output	UART
Working cycle	100 ms
Response time	100–500 ms

UART (A19NYTW)	
Response time	≤50 ms

TTL switch (A19NYGDW)	
Output	TTL level

Pin definition	
Pin 1	VCC - power supply input (DC)
Pin 2	GND - power ground
Pin 3 (RX), UART controlled output	Trigger input
Pin 4 (TX), UART controlled output	UART output
Pin 3 (RX), UART auto output	Processed/real-time value output selection
Pin 4 (TX), UART auto output	UART output
Pin 3 (RX), PWM output	Trigger input
Pin 4 (TX), PWM output	PWM output
Pin 3 (RX), switch output	Empty (NC)
Pin 4 (TX), switch output	High level if an object is detected in the sensing area; low level if not detected

Wiring	
Cable length	32.5±2 cm
Connector	HY2.0*4P with lock
Operating voltage	3.3-5 V
Output	UART / PWM pulse width / TTL switch output
Measuring range	28-450 cm

Ordering and support

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

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