



## W1005N Anti-Collision Warning LiDAR

SKU 114991375



### Description

W1005N(I) Anti-Collision LiDAR is designed by Leishen which can be good used in Collision-avoidance for AGV/RGV/Robot and Area Security. W1005N(I) provides 15 areas for users writing and download detection area into laser scanner. users can choose one detection area as its working detection area through inputting 4 switching value signals. W1005N(I) has 5m detection range within 270degree scan limit which enables users to free-set the detection area according to actual environment.

W1005N adopts TOF principle which is spinning inside and realize 5m detection range within 270degree. The Scan frequency is 3-11Hz, Scan Angular resolution is 1 degree. Setting laser scanner detection area by connecting PC's software with USB, each area can set 3 kinds of shape output. Detection area can be shifted by inputting switch value signal 15 filed sets at most) . The front of the W1005N represents the 0degree Angle

## Application

- AGV Collision-avoidance.
- Movable robot Collision-avoidance
- Security- Area Protection.

## Interface

D-Sub port connect to electrical cable, one end is a 15-pin d-sub socket, other end is 15 discrete wires.

Below sheet is the definition of these pin.

Color	Signal	Color	Signal
Blue	OUT1 (Outmost layer)	Brown (1)	IN1
Yellow	OUT2 (Middle layer)	Green (2)	IN2
Purple	OUT3 (innermost layer)	Pink (4)	IN3
lavender	Fault output (motor and data failure)	Orange (8)	IN4
White	VCC	Red	COM+
Black	GND	Grey	COM-

Setting filed set by inputting switching value of the corresponding filed set.

Field set	Input Signal			
	IN4	IN3	IN2	IN1
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

## Technical Details

Dimensions	180mm x 168mm x 120mm
Weight	G.W 672.3g N.W 512.3g
Battery	Exclude
Power supply	24VDC (9-28VDC)
Supply current	<300mA
Light source	Laser (Class I)
Detection range	Able to free set detection area within 5m range and 270° scan angle.
Area Settings output 1	Able to free set within 5m range and 270° scan angle.

Area Settings output 2, 3	Straight setting/Fan-shaped setting/Ratio setting
Output	NPN Open Collector; 1,2,3 : Low power level=Detected obstacle; output fault; High Power level= normal operating condition
Input (1-4)	OCI input, Can be used to switch monitoring area
Detection area Settings	Detection area shifting : Set detection area through inputting [ 1,2,3,4]
Output response time	<150ms(Scan speed 1rec/100ms)
Input response time	Period : 100ms
Indicator light	The yellow light glittering indicates the system operating; The red light glittering indicates obstacles be found in the area

Cable length	1m
Service life time	50,000 hours

*Part List*

AGV LiDAR	1
Serial Cable	1