

DADISICK[®]

**ELD-20D OBSTACLE AVOIDANCE
TYPE LASER RADAR**



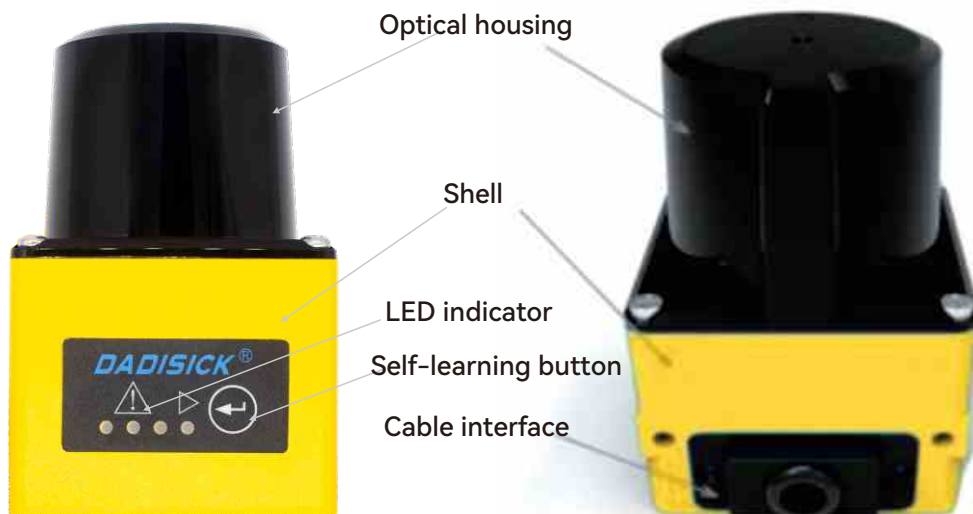
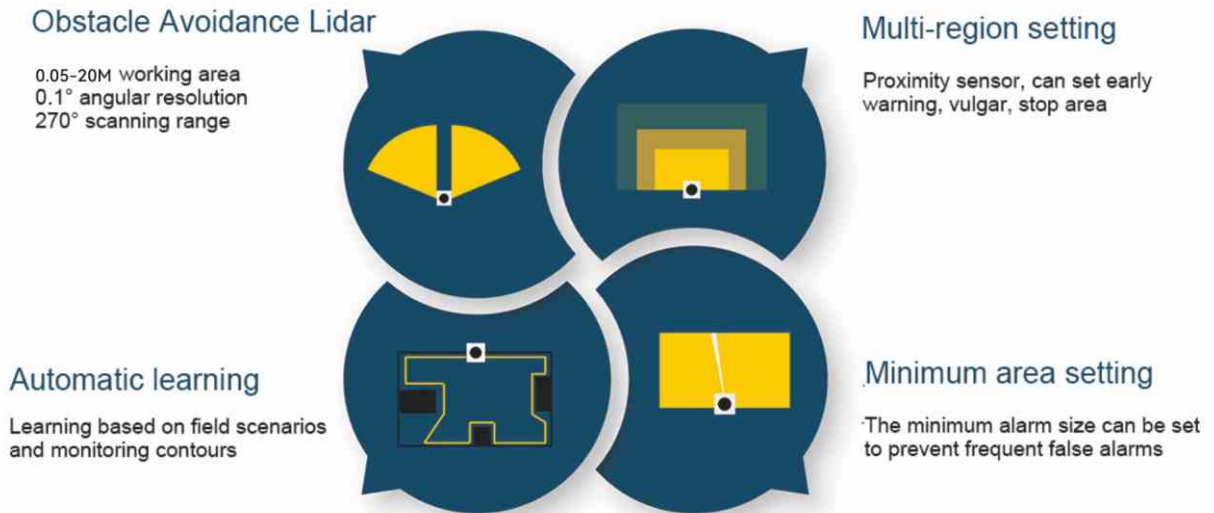
DADISICK TECHNOLOGY LIMITED

Product Brief

ELD-20D obstacle avoidance laser radar

20D two-dimensional TOF obstacle avoidance type laser radar has a 20M monitoring range and an angle of 270°. It has the function of stopping operation and taking into account the production. The products are mainly based on the newly developed compact, economical type, fast speed measurement, small size, light weight, low power consumption and low cost.

Product Features



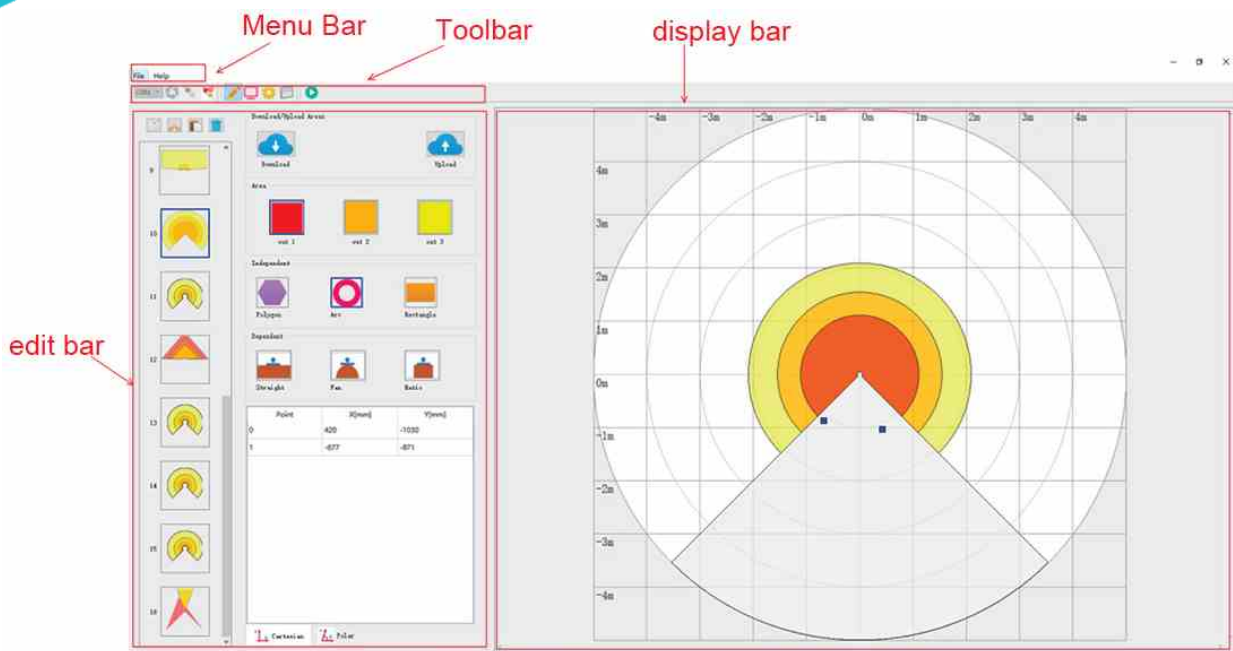
Note:

1. Optical cover: The optical cover is made of plastic. Please be careful that the cover is scratched by a sharp object and affect the optical performance.
2. LED indicator: the indicator has two functions
 - a) When Aries is working, if something intrudes into the work area, it will give an alarm through the LED indicator.
 - b) Indicate whether Aries is working properly.
3. Self-learning button: Aries has a self-learning function, which builds areas and area groups by scanning the surrounding environment.

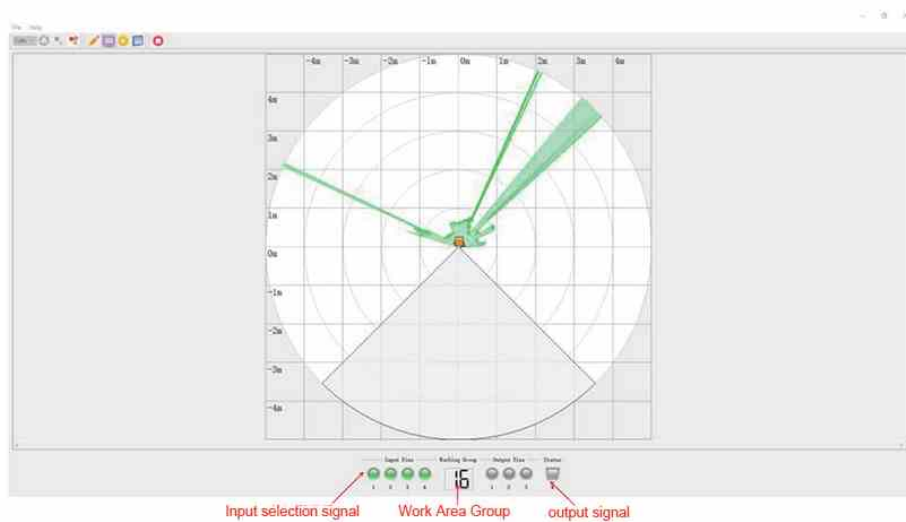
Parameters

Basic Information		
Product name	2D TOF obstacle avoidance laser radar	
Product number	ELD-20DN	ELD-20DP
IO output	NPN	PNP
Features		
Laser light source	905nm (class1)	
Scanning angle range	270°	
Scanning frequency	15Hz/30Hz	
Angle resolution	0.1°/0.3°	
Working area	0.05m~20m	
Self-learning function	Automatically scan the environment and generate areas	
Mechanical/electronic parameters		
Electrical connections	DB15MALE/ Scattered line	
Supply voltage	DC9V~28V	
Power consumption	2W	
Switch drive	DC30V 50mA MAX	
Shell color	yellow	
Protection class	IP65	
Weight	150g, Without cable	
Dimensions (L×W×H)	50mm×50mm×76mm	
Performance		
Recognizable object shape	Almost any shape	
Measurement error	±30mm	
Number of regional groups	16 regional groups, each group contains 3 regions	
Interface		
USB	Micro-USB	
Enter	GND/NC×4	
Switch output	NPN×3, Working status indicator	PNP×3, working status indication×1
Signal output hold time	100ms~10,000ms (Adjustable) typical value 330ms	
Response time	67ms~30,000ms (Adjustable) typical value 134ms	
Status Indicator	Status indication ×1, area group indication ×3	
Environmental parameters		
Anti-vibration	10-55Hz, amplitude 0.75mm, XYZ triaxial, 2 hours per axis; 50-200Hz, 196m/s ² (20G), scanning speed 2min/cycle, XUZ triaxial, 2 hours per axis	
Working temperature	-10°C~+55°C	
Storage temperature range	-30°C~+75°C	
Ability to resist ambient light	< 15,000lux	

Software diagram

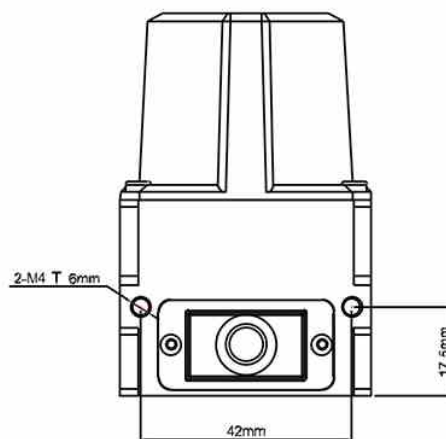
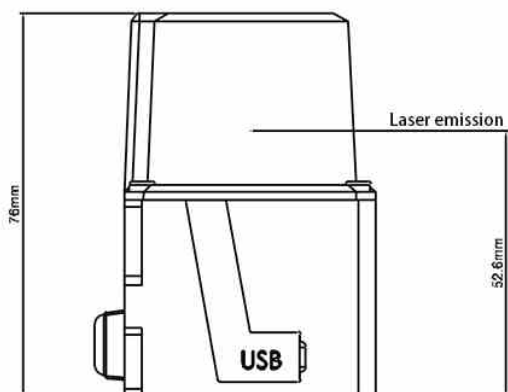
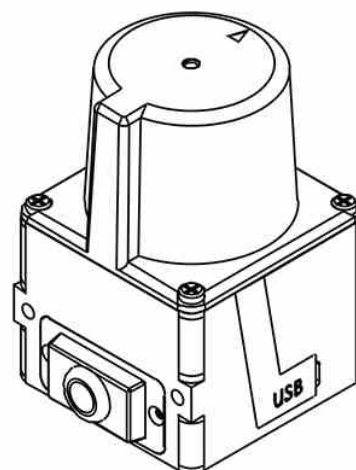
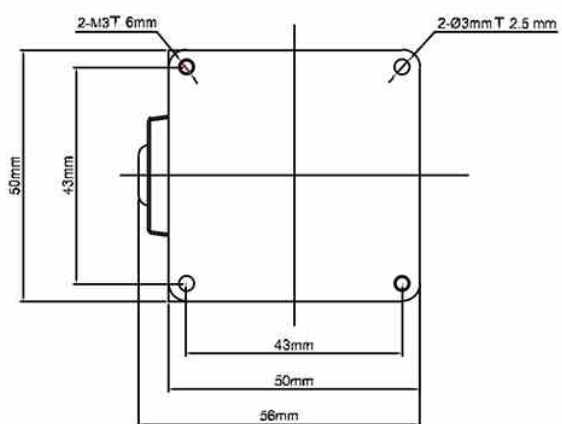


Edit interface



Monitoring interface

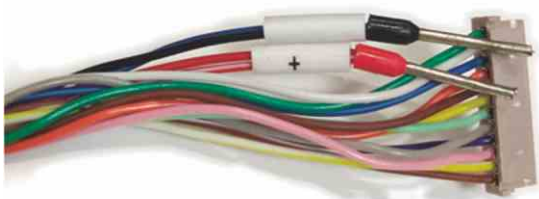
Product Size



Power accessories



GND/NC * 4

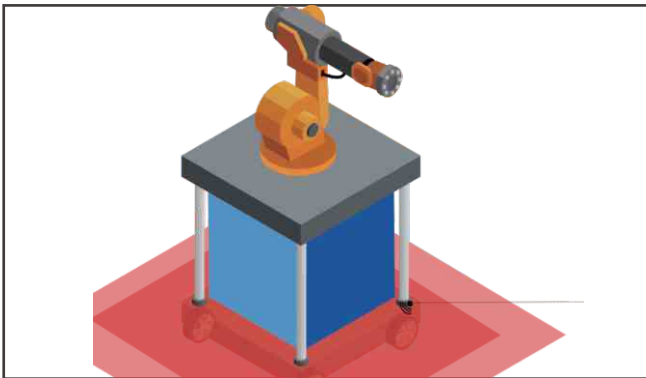


NPN * 3



Micro-USB

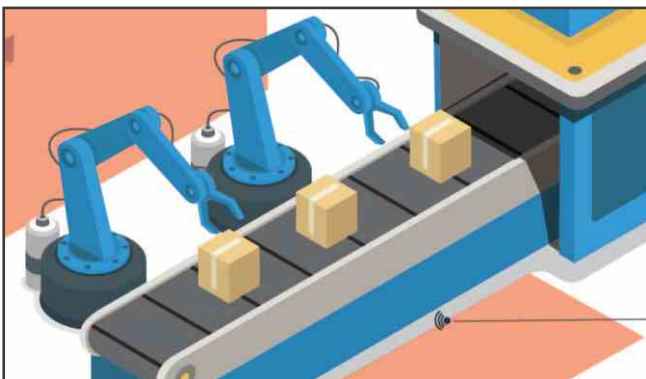
Application field



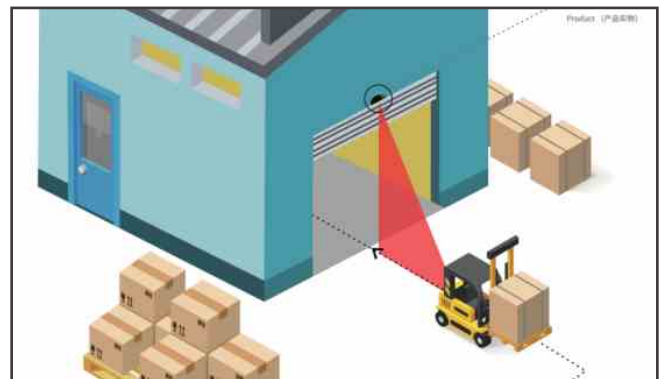
Robot/AGV autonomous obstacle avoidance



Activate parking barrier



Factory area safety protection



AGV height limit recognition



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