

LSD series

2D LiDAR

TE is a sensitive industrial grade obstacle avoidance lidar with a scanning frequency of up to 30Hz, which can be applied in industrial automation, perimeter security and other scenarios.



Angular resolution adjustable

01



Modbus protocol Supported

02



Higher reliability

03



Protection level IP67

04



Specification

Model	TE05	TE10
Ranging Principi	dToF	
Wavelength	905nm	
Horizontal Field of View	270°	
Measurement Range	≥10m@70%reflectivity ≥5m@10%reflectivity	≥20m@70%reflectivity ≥10m@10%reflectivity
Scan Frequency	10Hz; 15Hz; 20Hz; 25Hz; 30Hz	
Data Sample Rate	22.5kHz	
Horizontal Resolution	0.16°(10Hz), 0.24°(15Hz), 0.32°(20Hz), 0.4°(25Hz), 0.48°(30Hz)	
Accuracy(Typical)	±2cm	
Interface		
Data Protocol	RS485-MODBUS	
Digital Channels	4 Digital Inputs , 4 Digital Outputs	
Digital Outputs	4 NPN (or PNP), Iout ≤ 100mA	
Response Time	33ms(30Hz)	
Start Time	<15s	
Detection Output Time	0 ~ 1000ms	
Detection Holding Time	0 ~ 1000ms	
Laser and Electrical		
Laser Safety	Class 1 eye safe	
Ambient Light Immunity	< 100000 lux	
Rated Voltage Range	9 ~ 36V	



Power Consumption(Typical)	2.5W
Other Parameters	
Dimension	(D × W × H) 55mm × 55mm × 51mm
Operating Temperature	-25°C ~ 60°C
Storage Temperature	-40°C ~ 75°C
Ingress Protection	IP67

