# LGA60P1 Series

## 270° Laser Scanner





#### Surface coating technology

Greatly reduce dust adhesion and ensure accurate operation



#### Multiple echo processing technology

Performs well in complex environment



#### Response quickly

33ms quick scanning speed



#### Strong vibration resistance

Special internal design ensures its stable performance in vibrate environment

## **Application Case**







Forklift

Robots Robotic Arm





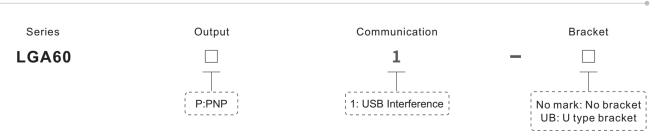
AGV Area Protection



#### **⇒** Product Parameter

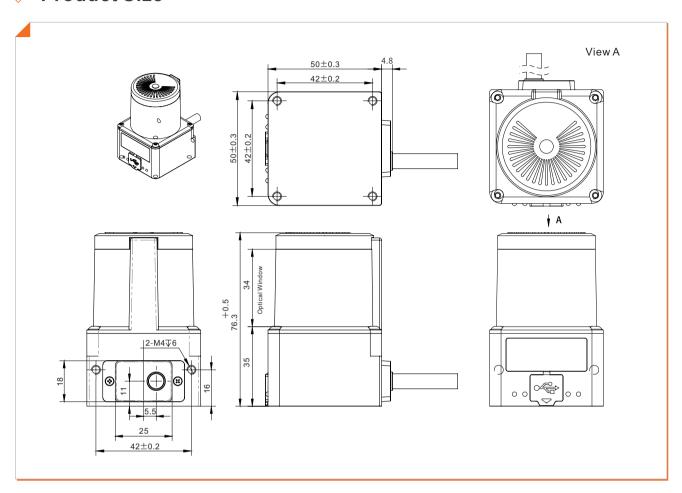
Product Feature			
	0.05~10m (reflectivity 90%)		
Detection Distance	0.05~8m (reflectivity 10%)		
Detection Angular	270°		
Wavelength	905nm		
Product Performance			
Response Time	Typical data 50ms		
Basic Tolerance	40mm		
Statistical Tolerance	30mm		
Channel	64 (3 detection area in each channel)		
Detection Output Time Delay	0~500ms (can be set in range)		
Detection Holding Time Delay	0~500ms (can be set in range)		
Detection Product Filter Anguler	0.5°~5° (can be set in range)		
Port			
Configured Port	1 ( Micro-USB)		
Switch Quantity Input	6 PNP		
Switch Quantity Output	4 (3 detection signal, 1 fault signal), single loop load capacity 100mA		
Indicator LED	4 (3 detection LED, 1 status LED)		
Electrical Performance			
Working Voltage	DC18-32V		
Consumption Current	60mA typical (under output load)		
Ambient Environment			
Object Reflectivity	5~1000%		
Working Ambient Environment	-10~50°C		
Light Immunity	Less than 15000 Lux		
Product Size	50* 50* 76.3mm		
Cables	Micro-USB wire 1m, power & IO wire 1m		

## ✓ Laser Scanner Model Description (e.g.: LGA60P1-UB)



## LGA60P1 Laser Scanner

### Product Size

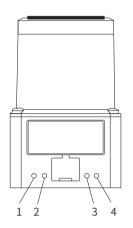


### Bracket Option

No	Brackets	Picture
1	U type bracket – UB	ESPE



#### **LED Status**



No	Indicator	Function
1	Power LED	When power on, green LED light on; When internal fault, power LED blink.
2	OUT3 LED	Any intrusion in OUT3 detection area, red LED on. Otherwise, LED off.
3	OUT2 LED	Any intrusion in OUT2 detection, yellow LED on, otherwise, LED off.
4	OUT1 LED	Any intrusion in OUT1 detection, orange LED on, otherwise, LED off.

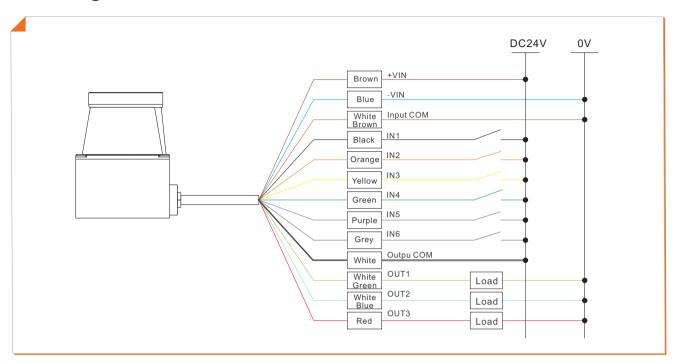
#### **Wire Specification**

• Sensor with a 14 pin leading wire, the specification of each pin as below sheet.

Color	Type	Signal	Function
Brown	Power	DC24V	Power Positive 18-32V
Blue	Power	DC0V	Power Negative
White & Brown	COM	INCOM	Input COM port
Black	Input	IN1	Inport 1
Orange		IN2	Inport 2
Yellow		IN3	Inport 3
Green		IN4	Inport 4
Purple		IN5	Inport 5
Grey		IN6	Inport 6
White	COM	ОСОМ	Output COM
White & Green	Output	OUT1	Port action when detect object in area 2
White & Blue		OUT2	Port action when detect object in area 1
Red		OUT3	Action when detect object in protection area
White & Red		Error OUT	Action when sensor with fault

## LGA60P1 Laser Scanner

### **Wiring**



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Port	Function		
OUT1	Used for warning or slow speed area		
OUT2	Used for stop of normal obstacle		
OUT3	Used for emergency stop of close obstacle		
The output is an open collector (PNP)signal, using optocoupler isolation			
The maximum load capacity of the output port is 100mA			
The output port corresponds to the graph drawn of software	OUT1 OUT2 OUT3		

#### **Configured Wiring**

• Use Micro-USB port to connect sensor with computer.

