

# About MyAntenna

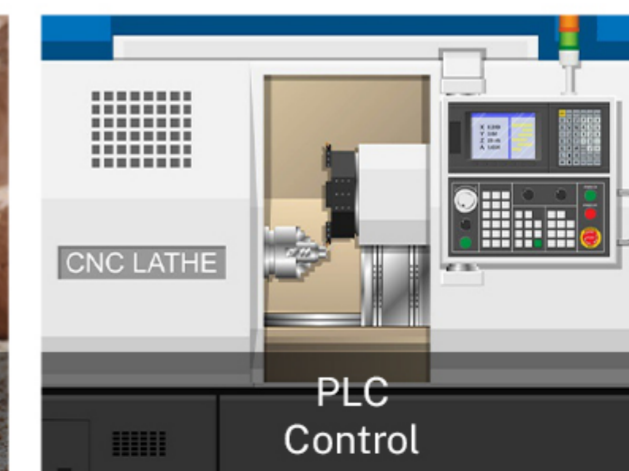
ShenZhen MyAntenna RF Technology Co., LTD is a nationally recognized high-tech enterprise specializing in the research, development, manufacturing, and sales of laser distance sensor, We provide exceptional laser distance sensor products to customers worldwide. Headquartered in Shenzhen, our company is equipped with a highly creative research and development team dedicated to advancing laser sensor products on a global scale.

MyAntenna laser distance sensor are now sold in more than 60 countries and regions worldwide. They find wide-ranging applications in fields such as material level, liquid level, and object height monitoring, AGV (Automated Guided Vehicle) systems, agricultural drones, intelligent robots, construction and environmental monitoring, high-temperature metal measurements, railcar displacement tracking, and other fields. We also support secondary development.

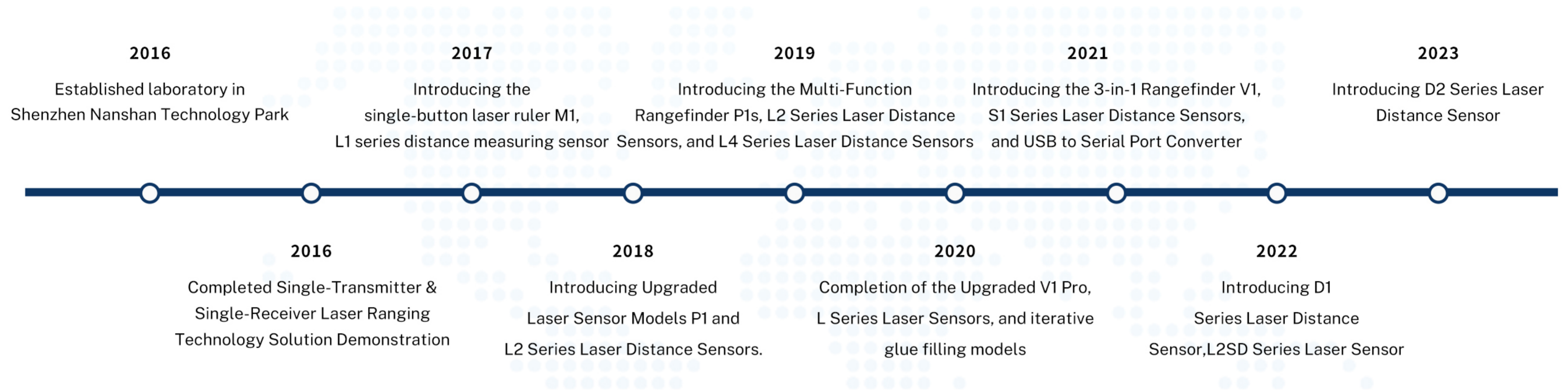
Our factory is located in LiaoBu DongGuang with over 1000 square meters modern production workshop. Our facility is equipped with advanced production equipment and a quality control system. Our factory team is dedicated to ensuring product manufacturing quality and on-time delivery, meeting our customers' high standards and stringent requirements.



ShenZhen MyAntenna RF Technology Co.,Ltd



# Development



# Product Introduction



## Laser Distance Sensor Module Series

Applied in industrial control measurements various networking and programming competitions, robot obstacle avoidance smart trash bins etc..



## Laser ruler series

Small laser distance sensor  
Up graded model-M1-P1-P1S



## 3 in 1 Laser distance sensor Level Series






Featuring Inclinator, Distance Measurement, Level, and Green Cross-Line Laser, clear in the sunlight

# LI SERIES TTL Phase Laser Distance Sensor

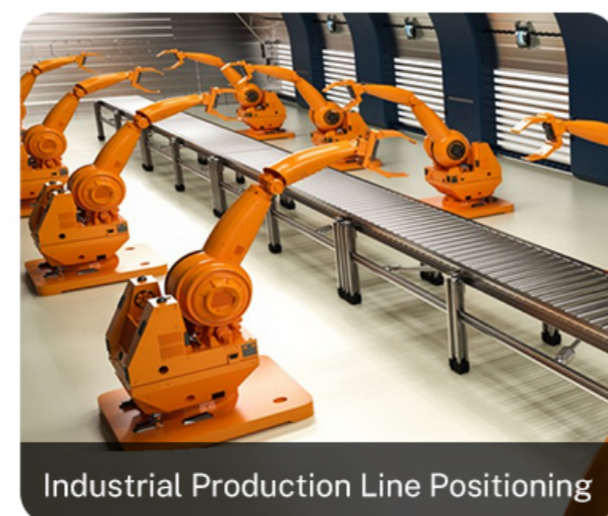
## Product Introduction

The L1 Series Phase-shift Laser Distance Sensor use the TTL communication interface and utilizes a 650nm visible red single-point laser. It is suitable for use with computers, microcontrollers etc.. The maximum measurement range can reach up to 80 meters, with an ideal accuracy of  $\pm 1\text{mm}$  in optimal conditions. The measurement rate can reach up to 20Hz. The product is widely used in warehousing and logistics AGV obstacle avoidance, auxiliary measurement, material height, auxiliary positioning, electronic competition, water level measurement(need to add a buoy) and other fields.




## Product Features

-  Millimeter-Level Resolution
-  Strong Temperature Adaptability
-  Low Influence on Measurement Results
-  Small size easy to handle
-  Long measurement distance, up to 80M

## Application areas



## Technical Parameters

Product Model	L1	L1s	L1s-Glue filling
Product Picture			
Power Supply	DC 5V		
Power Consumption	20Hz, 0.6W, standby <0.2W		
System Startup Time	600ms		
Optical Device Parameters	Wavelength : 650nm Optical power : <1mW Spot type : spot laser Spot size : <5mm at 10 meters Working life : about 20000 hours		
Communication Interface	TTL UART		
Baud Rate	9600/19200/38400/115200 Baud, Default 38400		
Serial Port Format	Baud rate : 38400 Data bits : 8 Stop bits : 1 Verification : none Flow Control : none		
Communication Protocol	Modbus_RTU ASCII Custom Hex		
Sampling Rate	10Hz(10 times per second), 20Hz(20 times per second), default 20HZ		
Measurement Range	0.05M-40M/0.05M-80M(available for choose)		
Zero Reference Point	front end		
Resolution	1mm		
Absolutely Accuracy	$\pm(1\text{mm} + D \cdot 5\text{‰})$ , D is the actual measurement distance		
Repeatability	$\pm 1\text{mm}$		
Working temperature	-10 — +50°C		
Operating humidity	$\leq \text{RH}85\%$		
Waterproof Rating	IP56		IP67
Cable	Aviation cable		
Net Weight	15.8g	55.6g	84.3g
Gross Weight	17.1g	206g	233g
Size	54.35*36.61*14.3mm	100*60*21mm ( Elbow interface ) 125*60*21mm ( Straight interface )	

# L2 SERIES RS485 Phase-shift Laser Distance Sensor

## Product Introduction

The L2 Series Phase-shift Laser Distance Sensor use the RS485 communication interface, standard Modbus RTU protocol. And utilizes a 650nm visible red single-point laser. It is suitable for use with PLC/Industrial computers/computers/ microcontrollers etc. The maximum measurement range can reach up to 80 meters, with an ideal accuracy of  $\pm 1\text{mm}$  in optimal conditions. The measurement rate can reach up to 20Hz. The product is widely used in assisting measurements, material/level/liquid height determination, auxiliary positioning, various industrial automation equipment, robotic arms, crane/rail positioning, drone positioning etc.

## Product Features

- mm** Millimeter-Level Resolution
- Strong Temperature Adaptability**
- PLC** Support PLC multiple networking
- Small size easy to handle**
- Long measurement distance, up to 80M**

## Application areas



## Technical Parameters






Product Model	L2	L2s	L2s-Glue filling
Product Picture			
Power Supply	DC 9-36V		
Power Consumption	20Hz, 0.6W, standby <0.2W		
System Startup Time	600ms		
Optical Device Parameters	Wavelength : 650nm Optical power : <1mW Spot type : spot laser Spot size : <5mm at 10 meters Working life : about 20000 hours		
Communication Interface	RS485		
Baud Rate	9600/19200/38400/115200 Baud, Default 115200		
Serial Port Format	Baud rate : 115200 Data bits : 8 Stop bits : 1 Verification : none Flow Control : none		
Communication Protocol	Modbus_RTU ASCII		
Sampling Rate	10Hz(10 times per second), 20Hz(20 times per second), default 20HZ		
Measurement Range	0.05M-40M/0.05M-80M(available for choose)		
Zero Reference Point	front end		
Resolution	1mm		
Absolutely Accuracy	$\pm(1\text{mm}+ D*5\text{‰})$ , D is the actual measurement distance		
Repeatability	$\pm 1\text{mm}$		
Working temperature	-10 – +50°C		
Operating humidity	$\leq \text{RH}85\%$		
Waterproof Rating	IP56		IP67
Cable	Aviation cable		
Net Weight	17.5 g	57.4 g	87 g
Gross Weight	18.8 g	208.8 g	236.3 g
Size	63.05*36.61*14.8mm		100*60*21mm ( Elbow interface ) 125*60*21mm ( Straight interface )

# L3 SERIES 4-20mA Phase-shift Laser Distance Sensor

## Product Introduction

The L3 Series Phase-shift Laser Distance Sensor use the 4-20mA analog current loop communication interface and utilizes a 650nm visible red single-point laser. It is suitable for various devices with analog interfaces, such as PLCs and industrial computers. The maximum measurement range can reach up to 80 meters, with an ideal accuracy of  $\pm 1\text{mm}$  in optimal conditions. The measurement rate can reach up to 20Hz. The product is widely used for auxiliary measurement of hydraulic equipment, material/level/liquid height determination, auxiliary positioning, various industrial automation equipment, robotic arms, crane/rail positioning, drone positioning etc.

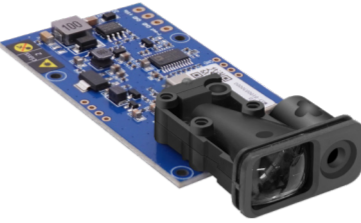

## Product Features

-  Millimeter-Level Resolution
-  Strong Temperature Adaptability
-  Low Influence on Measurement Results
-  Small size easy to handle
-  Long measurement distance, up to 80M

## Application areas



## Technical Parameters






Product Model	L3	L3s	L3s-Glue filling
Product Picture			
Power Supply	DC 9-36V		
Power Consumption	20Hz, 0.8W, standby <0.2W		
System Startup Time	600ms		
Optical Device Parameters	Wavelength : 650nm Optical power : <1mW Spot type : spot laser Spot size : <5mm at 10 meters Working life : about 20000 hours		
Communication Interface	4-20mA Analog Current		
Baud Rate	9600/19200/38400/115200 Baud, Default 115200		
Serial Port Format	Baud rate : 115200 Data bits : 8 Stop bits : 1 Verification : none Flow Control : none		
Communication Protocol	ASCII		
Sampling Rate	Selectable Frequencies: 1HZ, 2HZ, 5Hz, 10Hz, and 20Hz, default 20Hz		
Measurement Range	0.1M-40M/0.1M-80M(available for choose)		
Zero Reference Point	front end		
Resolution	1mm		
Absolutely Accuracy	$\pm(1\text{mm} + D \times 5\text{‰})$ , D is the actual measurement distance		
Repeatability	$\pm 1\text{mm}$		
Working temperature	-10 – +50°C		
Operating humidity	$\leq \text{RH}85\%$		
Waterproof Rating	IP56		IP67
Cable	Aviation cable		
Net Weight	20.7 g	275.4 g	488.2 g
Gross Weight	21.2 g	402.6 g	613.7 g
Size	79.05*36.61*14.3mm		140*78*50mm

# L4 SERIES RS232 Phase-shift Laser Distance Sensor

## Product Introduction

The L4 Series Phase-shift Laser Distance Sensor use the RS232 communication interface and utilizes a 650nm visible red single-point laser. It is suitable for use with computers, microcontrollers etc. The maximum measurement range can reach up to 80 meters, with an ideal accuracy of  $\pm 1\text{mm}$  in optimal conditions. The measurement rate can reach up to 20Hz. The product is widely used in warehousing and logistics AGV obstacle avoidance, auxiliary measurement, material height, auxiliary positioning, electronic competition and other fields.



## Product Features

-  Millimeter-Level Resolution
-  Strong Temperature Adaptability
-  Low Influence on Measurement Results
-  Small size easy to handle
-  Long measurement distance, up to 80M

## Application areas



## Technical Parameters

Product Model	L4	L4s	L4s-Glue filling
Product Picture			
Power Supply	DC 5V		
Power Consumption	20Hz, 0.5W, standby <0.2W		
System Startup Time	600ms		
Optical Device Parameters	Wavelength : 650nm Optical power : <1mW Spot type : spot laser Spot size : <5mm at 10 meters Working life : about 20000 hours		
Communication Interface	RS232		
Baud Rate	9600/19200/38400/115200 Baud, Default 38400		
Serial Port Format	Baud rate : 38400 Data bits : 8 Stop bits : 1 Verification : none Flow Control : none		
Communication Protocol	Modbus_RTU ASCII Custom Hex		
Sampling Rate	10Hz(10 times per second), 20Hz(20 times per second), default 20HZ		
Measurement Range	0.05M-40M/0.05M-80M(available for choose)		
Zero Reference Point	front end		
Resolution	1mm		
Absolutely Accuracy	$\pm(1\text{mm} + D \times 5\text{‰})$ , D is the actual measurement distance		
Repeatability	$\pm 1\text{mm}$		
Working temperature	-10 – +50°C		
Operating humidity	$\leq \text{RH}85\%$		
Waterproof Rating	IP56	IP67	
Cable	Aviation cable		
Net Weight	15.6 g	55.7 g	87 g
Gross Weight	16.8 g	204.4 g	236.3 g
Size	54.35*36.61*14.3mm	100*60*21mm ( Elbow interface ) 125*60*21mm ( Straight interface )	

# S SERIES 1D TOF Short Range Laser Distance Sensor

## Product Introduction

S1 series laser distance sensor has fast monitoring speed, resistance to sunlight interference, support for lens dirt calibration algorithms, centimeter-level accuracy, maximum detection distance of 4 meters, mainly for AGV, sweeping robot obstacle avoidance, face recognition equipment wake-up, TV human body proximity monitoring, trash bins overflow monitoring, projector autofocus, library museum entry and exit statistics and various industrial distance monitoring, occupancy monitoring and other application scenarios.



## Product Features

- 5% 5% accuracy
- 20hz Rate is up to 20Hz
- Angle range measurement
- Small size, easy to invisible installation
- Protection against electrostatic and electromagnetic interference

## Application areas



## Technical Parameters






Product Model	S1-250	S1-400
Product Picture		
Measurement Range	2.5m	4m
Operating Environment	Indoor/outdoor	
Power Supply	3.3-5V	
Power Consumption	<0.2W	
Current	<33mA	
Communication Interface	TTL interface	
Baud Rate	2400-256000 Baud available for choose, default: 115200	
Measurement Mode	Single Measurement/ Automatic Continuous Measurement (Factory Default)	
Communication Protocol	Modbus RTU ASCII	
Speed	Selectable Frequencies: 5Hz, 10Hz, and 20Hz, default 20Hz	
Wavelength	940nm	
Emission Angle	19°	
Field of View	FOV 24°	
Accuracy	< 5%	
Indoor Measurement Range	2cm-400cm(0KLUX)	
Outdoor Measurement Range	2cm-80cm(100KLUX)	
Working temperature	-30° ~ 70°	
Eye-safe	Class 1	
Device Address	Default 2	
Size	20x16.8x6.2mm	

# HANDHELD SERIES Portable Laser Range Finder

## Product Introduction

M1, P1, P1S series laser range finder with accurate measurement, easy to operate features. It's 4-hour battery life for an enhanced measuring experience to you. Suitable for both industrial and household use with it's industrial-grade accuracy. P1S, capable of sensing slopes at 0.1° precision and delivering quick and accurate measurements, and be a very convenient tool in our daily life.

## Product Features

-  Millimeter-level Resolution
-  4-hour Battery Life
-  Small Size Easy to Handle
-  Multiple Types of Measurements
-  Real-time measurement

## Application areas



Routine Home Measurement






Indoor Renovation Measurement



Room Measurement of Designer

## Technical Parameters

Product Model	M1	P1	P1S
Product Picture			
Size	100×35×18mm		
Measurement Range	25m/45m/60m	40m	40m/60m
Accuracy	±2mm		
Laser Type	630-690nm<1mW		
Auto Laser Shut-off	Deactivation after 90 seconds without any operate		
Auto Instrument shut-off	Deactivation after 120 second without any operate		Deactivation after 180 seconds without any operate
Battery Type	AAA battery/ AAA lithium battery( can be choosed)		
Working temperature	-10°C -40°C		
Area Measurement			Support
Volume Measurement			Support
Trigonometric Measurement			Support
Spatial Measurement (Accessories Required)			Support
Countdown Measurement	10s	10s	10s
High-Precision Angle Measurement			Support
Screen Follow			Support
Baseline Switching			Support
Switching Units	Support	Support	Support
Data Memory			20 sets
10s self-test			Support
Angular Plane Measurement (Requires Accessories)			Support



# VI SERIES 3 in 1 Distance Measuring Level

## Product Introduction

V1 series combined inclinometer, rangefinder, and level into one, offering 8 hours battery life, precision, portability, and ease of use for user. Real-time voice data reporting for excellent use experience. Internationally accredited by Authority to guaranteed quality.

Millimeter-level precision sensor with red laser ranging and enhanced visibility, powerful green crosshair assistance, ensuring clear readings even in daylight. This tool is designed for efficient data acquisition and increased work productivity.

## Product Features

- mm** Millimeter-level Resolution
- 12-hour** Battery Life
- 120m** 120M Measurement Range
- Multiple Types of Measurements
- Real-time voice data reporting

## Application areas



Routine Home Measurement





Indoor Renovation Measurement



Wood Processing Measurement

## Technical Parameters

	Product Model	V1	V1 Pro
	Product Picture		
Horizontal Function	Accuracy		±5mm( at 5M)
	Visible Range		Visible at 10M
	Laser Color	Red Laser	Green laser crosshair
	Laser Wavelength		505-535nm
	Laser Class		Class 2, <5mW
	Continuous Operating Time		8 hours
Optical Measurement Function	Accuracy	± 2mm	
	Measurement Range	0.05-50M /80M/120M( can be choosed)	
	Laser Color	Red laser	
	Laser Wavelength	635-650nm	
	Laser Class	Class 2, <1mW	
	Continuous Operating Time	12 hours	
Angle Measurement Function	Accuracy	±0.1°	
	Measurement Range	±90°	
	Display Type	Dynamic numeric display	
	Net Weight	6.0 ounces(170g)	6.4 ounces(180g)
	(1/4"-20 ) Tripod (1/4"-20)		6.8 ounces(190g )
	Product Size	129.5*65*28mm	
	Material	ABS+PC	
	Protection Class	IP54	
	Battery Type	Built-in Lithium Battery	
	Working Temperature	(-10°C ~45°C )	
	Mounting Method	1/4"-20	

# DI SERIES Dual-Mode Bluetooth Laser Distance Sensor

## Product Introduction

D1 Series dual-mode bluetooth laser distance sensor with 120M long measurement range and ultra-durable 7075 aluminum alloy case. UNC 1/4-20 centered interface design, triple-Axis Horizontal Bubble Level with LED warning. With built in 180mA lithium battery, Type-c input and data transfer functions and support App Protocol Control.

## Product Features

- mm** Millimeter-level Resolution
- 12-hour** Battery Life
- 120m** 120M Measurement Range
- Supports Bluetooth Pass-Through Protocol
- Built in Bubble Level with LED warning

## Application areas



Measure Roof Beam Deflection





Bridge and Tunnel Monitoring



Distance Measurement

## Technical Parameters

	Product Model	D1-40	D1-80
	Product Picture		
Laser Measurement Function	Measurement Range	0.05~80M	0.05~120M (work with reflector)
	Accuracy	±2mm	
	Laser Class	Class 2, <1mW	
	Laser Type	635-650nm	
	Laser Color	Red laser	
	Low Power Consumption	Operating <1.2W, standby <0.2W	
Angle Measurement Function	Operating Humidity	≤ RH85%	
	Accuracy	±0.1°	
	Measurement Range	±90°	
Communication Mode	Display Type	Dynamic numeric display	
	TTL	Type C	
Serial Port Format	Wireless Communication	BLE 4.2	
	T T L	Baud rate : 115200 Data bits : 8 Stop bits : 1 Verifica : none Flow Control : none	
Physical Parameters	Net Weight	345g	
	Size	140*53*35mm	
	Material	Aluminum alloy	
	Protection Class	IP56	
	Working Temperature	-10°C ~50°C	
	Storage Temperature	-20°C ~60°C	
	Storage Humidity	≤ RH85%	
	Battery Type	Built-in Lithium Battery, dual Ports for Continuous 8-Hour Operation	