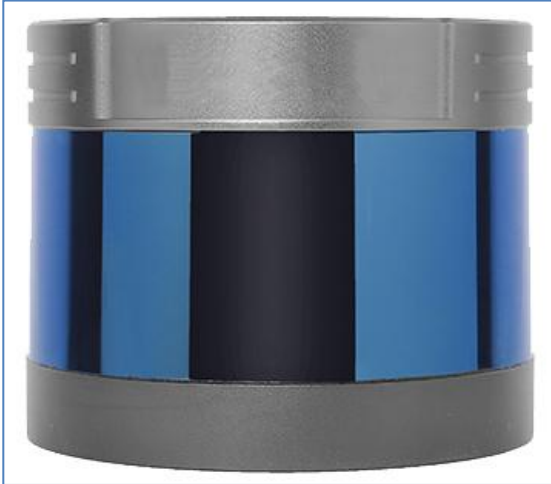


## STTM Series LiDAR (Light Detection and Ranging)

### 1. Mechanical LiDAR

#### 1.1 16 Line LiDAR



#### Specifications

|                                |  |
|--------------------------------|--|
| <b>Model</b>                   | <b>STTM-905-16</b>                           |
| Laser Wavelength               | 905nm  |
| Lines                          | 16 lines                                     |
| Laser Mode                     | Pulsed laser                                 |
| Laser Safety Level             | Class 1 eye-safe                             |
| Detection Capability for Glass | Transparent glass detectable (optional)      |
| Echo Mode                      | Single echo/double echo, (mode optional)     |
| Frequency of Points            | 320,000 (single echo), 640,000 (double echo) |
| Minimum Detection Distance     | 0.2m   |
| Maximum Detection Distance     | 150m (at 30% reflectivity)                   |
| Rotation Frequency             | 5Hz/10Hz/20Hz                                |
| Horizontal Field of View       | 360°   |
| Vertical Field of View         | 30°(-15° ~ +15°)                             |
| Horizontal Angle Resolution    | 0.09°(5Hz), 0.18°(10Hz), 0.36°(20Hz)         |
| Vertical Angle Resolution      | 2°   |
| Accuracy                       | ±2cm (>0.5m); ±5cm (0.2m ~ 0.5m)             |
| Data Output                    | UDP/IP Ethernet (100Mbps)                    |
| Voltage                        | +12V~+24V                                    |
| Power Consumption              | Typical value 8W                             |
| Working Temperature            | -40°C ~ +85°C                                |
| Protection Level               | IP67   |
| Dimension                      | ≤84mm*φ102mm                                 |
| Weight                         | ≤860g (airborne models≤650g)                 |



AGV



Service Robots

**1.2 32 Line LiDAR**

**Specifications**

|                             |  |
|-----------------------------|--|
| Model                       | <b>STTM-905-32</b>                       |
| Laser Wavelength            | 905nm                                    |
| Lines                       | 32 lines                                 |
| Laser Mode                  | Pulsed laser                             |
| Laser Safety Level          | Class 1 Eye-Safe                         |
| Echo Mode                   | Single echo /double echo (mode optional) |
| Frequency of Points         | 576,000 Points per second                |
| Minimum Detection Distance  | 0.2m                                     |
| Maximum Detection Distance  | 150m (at 30% reflectivity)               |
| Rotation Frequency          | 5Hz/10Hz/20Hz                            |
| Horizontal Field of View    | 360°                                     |
| Vertical Field of View      | 31° (-15° ~ +16°)                        |
| Horizontal Angle Resolution | 0.1° (5Hz), 0.2° (10Hz), 0.4° (20Hz)     |
| Vertical Angle Resolution   | 1°                                       |
| Accuracy                    | ±2cm (> 0.5m), ±5cm (0.2m~ 0.5m)         |
| Data Output                 | UDP/IP Ethernet (100Mbps)                |
| Voltage                     | +12V~+24V                                |
| Power Consumption           | Typical value 12W                        |
| Working Temperature         | -40°C~ +85°C                             |
| Protection Level            | 1P67                                     |
| Dimension                   | ≤84mm*Φ102mm                             |
| Weight                      | ≤950g (airborne models < 700g)           |



Survey



Driverless Delivery Robot

## 2. Intrinsically Safe Explosion-Proof LiDAR

### 2.1 16 Line Intrinsically Safe Explosion-Proof LiDAR



#### Specifications

| Model                       | STTM-905-G120                                 | STTM-905-120                                       |
|-----------------------------|---|--|
| Laser Wavelength            | 905nm   |  |
| Lines                       | 16 lines                                      |  |
| Laser Mode                  | Pulsed laser                                  |  |
| Scanning Method             | Mechanical rotation                           |  |
| Laser Level                 | Class1 eye-safe                               |  |
| Echo Mode                   | Single echo / double echo (mode select-able)  |  |
| Frequency of Points         | 320,000 (single echo), 640,000 (double echo)  |  |
| Minimum Detection Distance  | 0.3m  |  |
| Maximum Detection Distance  | 120m (at 30% reflectivity)                    |  |
| Rotation Frequency          | 5Hz/10Hz/20Hz                                 |  |
| Horizontal Field of View    | 360°  |  |
| Vertical Field of View      | 30° (-15° ~ +15°)                             |  |
| Horizontal Angle Resolution | 0.09° (5Hz), 0.18° (10Hz),0.36° (20Hz)        |  |
| Vertical Angle Resolution   | 2°  |  |
| Accuracy                    | (0.3m-20.00m) ±0.03<br>(20.01m-120.00m) ± 0.3 | (0.2m-0.5m) (50m-150m)<br>± 0.05,(0.5m-50m) ± 0.02 |
| Voltage                     | +12V~+24V                                     |  |
| Power Consumption           | Typical value 9W                              |  |
| Working Temperature         | -0°C~+40°C                                    | -20°C~+55°C  |
| Protection Level            | IP67  |  |
| Dimension                   | ≤(84mm*Φ100mm)                                |  |
| Weight                      | About 1135g                                   |  |
| Explosion Proof Level       | Class I                                       | Class II , Class III                               |



Driverless Inspection Robot

## 2.2 32 Line Intrinsically Safe Explosion-Proof LIDAR



### Specifications

| Model                       | STTM-905-G150                               | STTM-905-320         |
|-----------------------------|---|----------------------|
| Laser Wavelength            | 905nm                                       |                      |
| Lines                       | 32 lines                                    |                      |
| Laser Mode                  | Pulsed laser                                |                      |
| Scanning Method             | Mechanical rotation                         |                      |
| Laser Safety Level          | Class1 Eye-Safe                             |                      |
| Echo Mode                   | Single echo/ double echo (mode select-able) |                      |
| Frequency of Points         | 576,000 points per second                   |                      |
| Minimum Detection Distance  | 0.2m  |                      |
| Maximum Detection Distance  | 150m (at 30% reflectivity)                  |                      |
| Rotation Frequency          | 5Hz/10Hz/20Hz                               |                      |
| Horizontal Field of View    | 360°  |                      |
| Vertical Field of View      | 31° (-15° ~ +16°)                           |                      |
| Horizontal Angle Resolution | 0.1° (5Hz) /0.2° (10Hz) /0.4° (20Hz)        |                      |
| Vertical Angle Resolution   | 1°  |                      |
| Accuracy                    | (0.5m-150m)±0.02, (0.2m-0.5m)±0.05          |                      |
| Voltage                     | +11V~+24V                                   |                      |
| Power Consumption           | Typical value 12W                           |                      |
| Working Temperature         | -0°C~+40°C                                  | -20C~+55°C           |
| Protection Level            | IP67  |                      |
| Dimension                   | ≤84mm*Φ102mm                                |                      |
| Weight                      | About 1300g                                 |                      |
| Explosion Proof Level       | Class I                                     | Class II , Class III |



Intelligent Security Alarm System



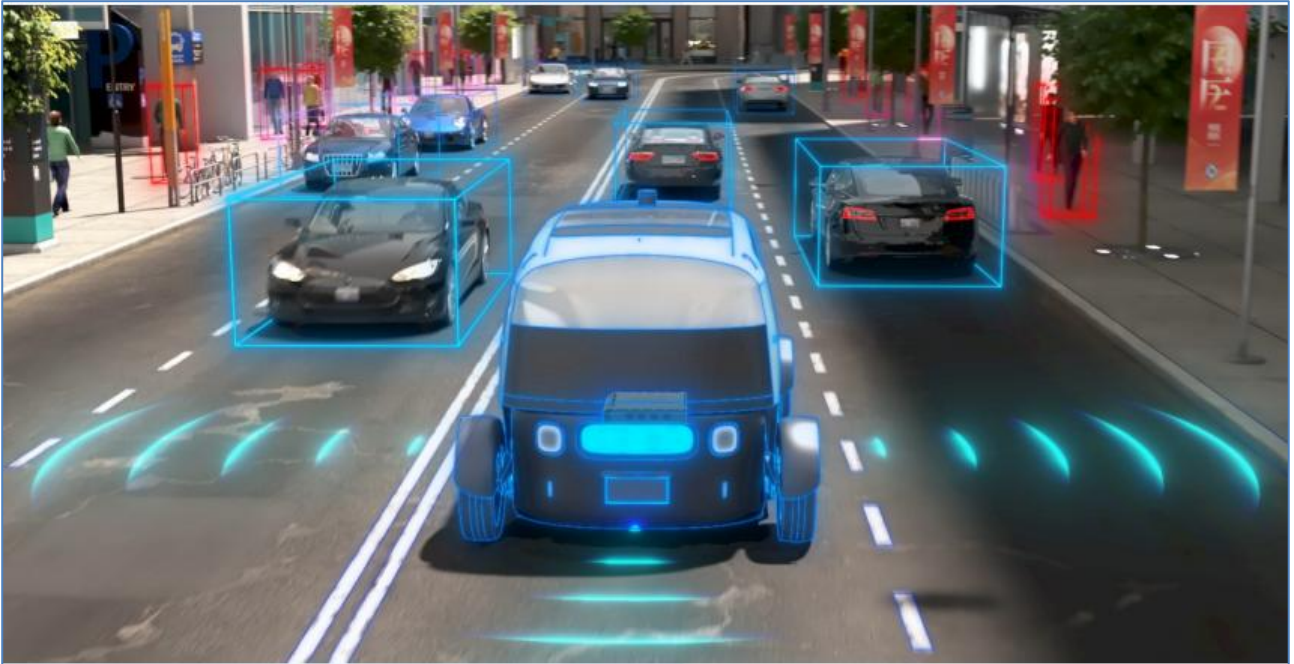
### 3. Solid-state 128 Line LiDAR

#### 3.1 Automotive-grade Hybrid Solid-state 128 Line LiDAR



#### Specifications

| Model                       | STTM-905-128   |
|-----------------------------|--|
| Laser Wavelength            | 905nm  |
| Lines                       | 128 lines  |
| Scanning Method             | Prism rotation   |
| Laser mode                  | Pulsed laser   |
| Laser Level                 | Class 1 Eye-Safe   |
| Echo Mode                   | Single echo/double echo (mode optional)  |
| Frequency of Points         | 768,000 Points per second (Single echo)<br>1,536,000 Points per second (double echo) |
| Minimum Detection Distance  | 0.3m   |
| Maximum Detection Distance  | 200m (at 30% reflectivity)   |
| Rotation Frequency          | 5Hz/10Hz/20Hz  |
| Horizontal Field of View    | 120°(-60.0°~ +60.0°)   |
| Vertical Field of View      | 25° (-18° ~ +7°)   |
| Horizontal Angle Resolution | 0.1° (5Hz), 0.2° (10Hz), 0.4° (20Hz)   |
| Vertical Angle Resolution   | 0.2°   |
| Accuracy                    | +3cm @1 sigma2   |
| Data Output                 | UDP/IP Ethernet (100Mbps)  |
| Voltage                     | +9V~+36V   |
| Power Consumption           | Typical value 15W  |
| Working Temperature         | -40°C~ +85°C   |
| Storage Temperature         | -40°C~+105°C   |
| Protection Level            | IP69K  |
| Dimension                   | 130x88.5x70mm  |
| Weight                      | ≤1000g   |



Smart Transportation

### 3.2 Automotive-grade Hybrid Solid-state 1550nm LiDAR



#### Specifications

| Model                       | STTM-1550-L1                 |
|-----------------------------|------------------------------|
| Laser Wavelength            | 1550nm                       |
| Laser Level                 | Class1(IEC-60825)            |
| Laser Mode                  | Pulsed laser                 |
| Frequency of Points         | 1,200,000 points per second  |
| Maximum Detection Distance  | 600m (250m 10% reflectivity) |
| Frame Rate                  | 10Hz                         |
| Horizontal Field of View    | 120°(-60°~+60°)              |
| Vertical Field of View      | 25°(-12.5°~+12.5°)           |
| Horizontal Angle Resolution | 0.05°(Non global)            |
| Vertical Angle Resolution   | 0.05°(Non global)            |
| Accuracy                    | ±2cm                         |
| Data Output                 | UDP/IP Ethernet( 1000Mbps)   |
| Voltage                     | +9V~+36V                     |
| Power Consumption           | Typical value 30W            |
| Working Temperature         | -40°C~+60°C                  |
| Protection Level            | IP67                         |
| Dimension                   | ≤228*220*48mm                |
| Weight                      | ≤3000g                       |