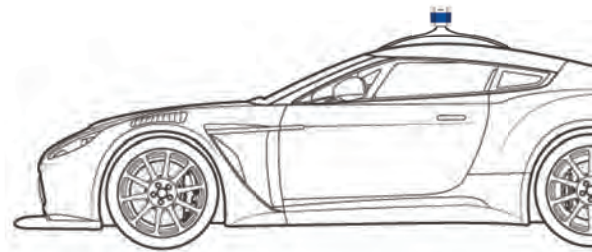




# Pandar40P

## 40-Channel Mechanical LiDAR

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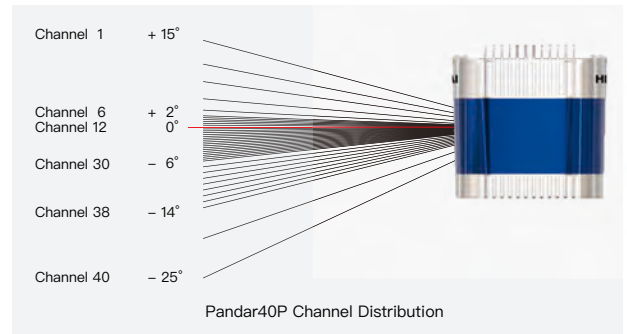


# Pandar40P

Pandar40P is a 40-channel mechanical LiDAR. It creates 360° 3D imaging by rotating 40 laser diodes inside the housing. The unique channel distribution makes it more suitable for autonomous driving applications.

Pandar40P is marked by three key features:

1. Interference rejection: undisturbed in the proximity of other working LiDARs
2. Extended range: seeing 10%–reflectivity objects from 200 meters away
3. PTP synchronization: option of PTP time sync simplifies vehicle cabling



Pandar40P has gone through stringent reliability tests, including HALT (highly accelerated life test), vibration strength test and mechanical resonance test, ensuring excellent and stable performance in harsh environments. Pandar40P serves a wide range of industries, including autonomous driving, HD mapping and logistics.

## Advantages of Pandar40P



Extended  
Measurement Range



Optimized  
Angular Resolution



Wide Field of View



Interference  
Rejection



Compact  
and Lightweight

## Specifications

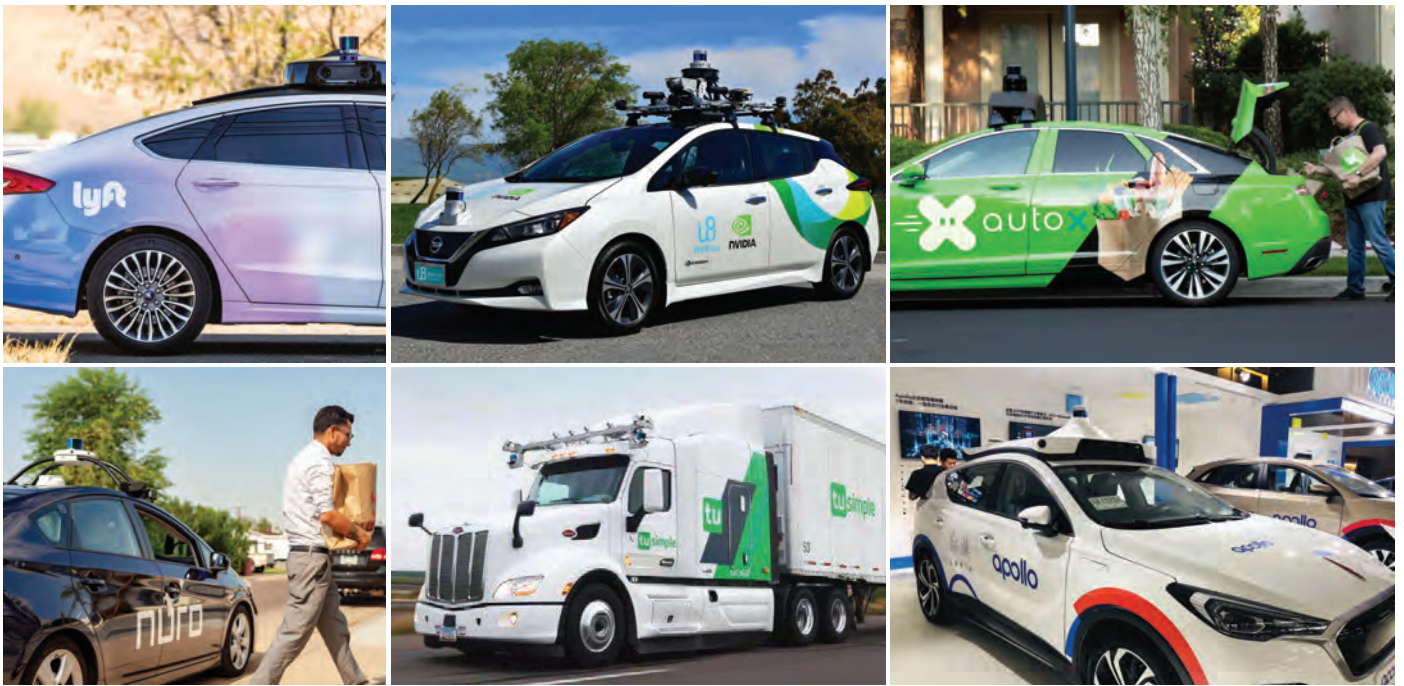
Sensor			
Operational Principle	Time of Flight	Rotation Rate	10 Hz, 20 Hz
Scanning Method	Mechanical Rotation	FOV (Vertical)	40° (–25° to +15°)
Channel	40	Angular Resolution (Vertical)	Finest at 0.33°
Measurement Range	0.3 m to 200 m (at 10% reflectivity)	FOV (Horizontal)	360°
Measurement Accuracy	±5 cm (0.3 m to 0.5 m), ±2 cm (0.5 m to 200 m)	Angular Resolution (Horizontal)	0.2° (10 Hz), 0.4° (20 Hz)
Returns (Configurable)	Single/Dual Return (Strongest, Last)	Interference Rejection	Yes
Clock Source	GPS/PTP	PTP Clock Accuracy	≤1 μs
PTP Clock Drift	≤1 μs/s		
Output			
Data Output	UDP: distance, azimuth angle, intensity	Data Transmission	UDP/IP Ethernet (100 Mbps)
Data Points Generated	Single Return Mode: 720,000 points per second Dual Return Mode: 1,440,000 points per second		

## Mechanical/Electrical/Operational

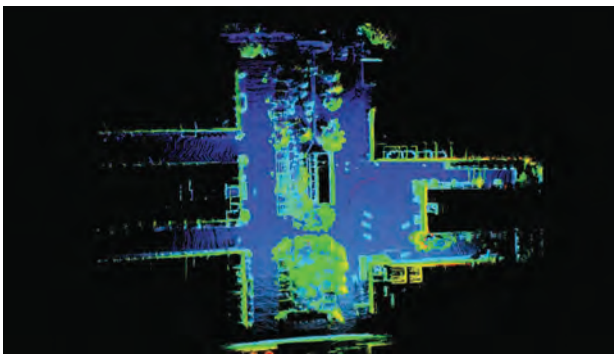
Size	Height: 116.7 mm, Top Diameter: 118.0 mm, Bottom Diameter: 116.0 mm		
Weight	1.52 kg	Operating Voltage	9 V to 48 V
Power Consumption	18 W	Laser Class	Class 1 Eye Safe
Operating Temperature	-20°C to +65°C	Environmental Protection	IP6K7

## Application Scenarios

### Autonomous Driving



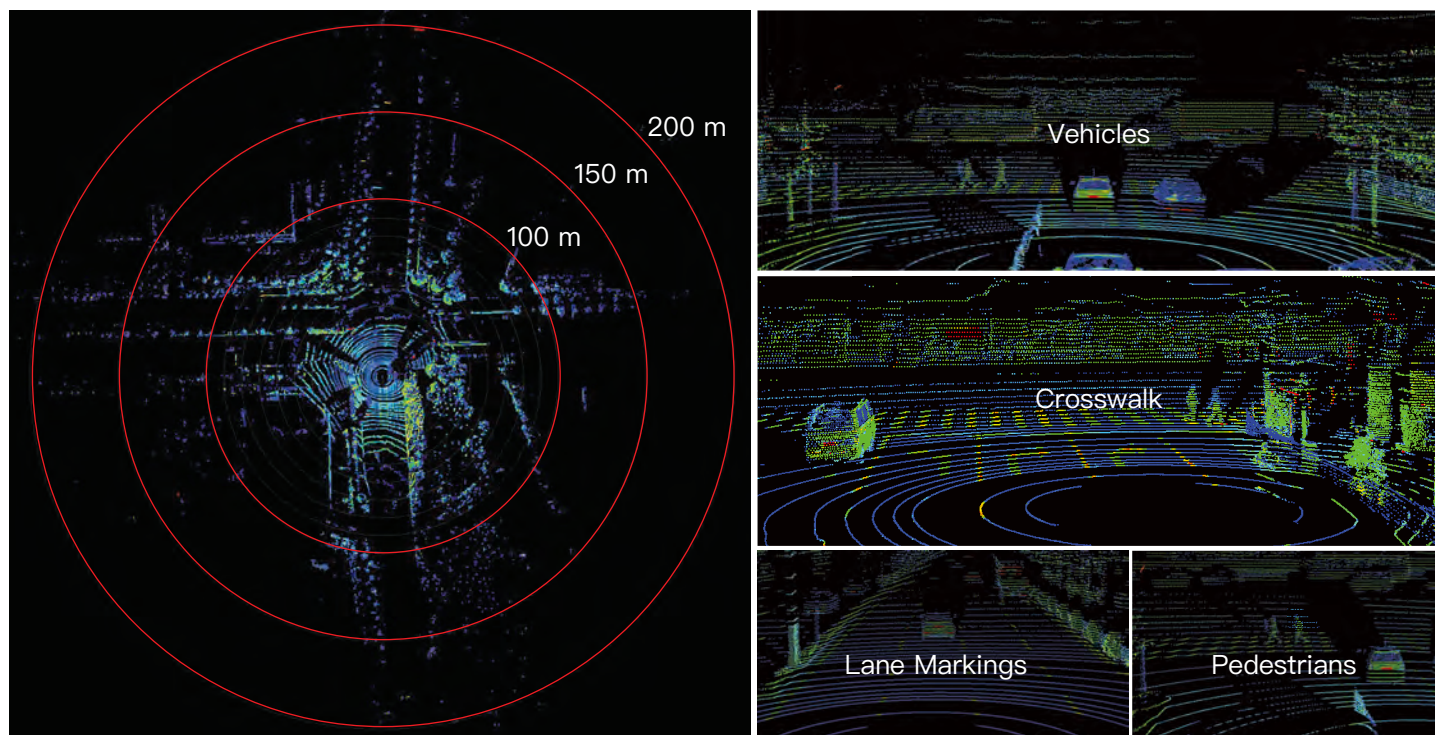
### HD Mapping



### Autonomous Logistics



## Data Captured by Pandar40P



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1-1-3 Meieki, Nakamura-ku, Nagoya

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Website QR Code