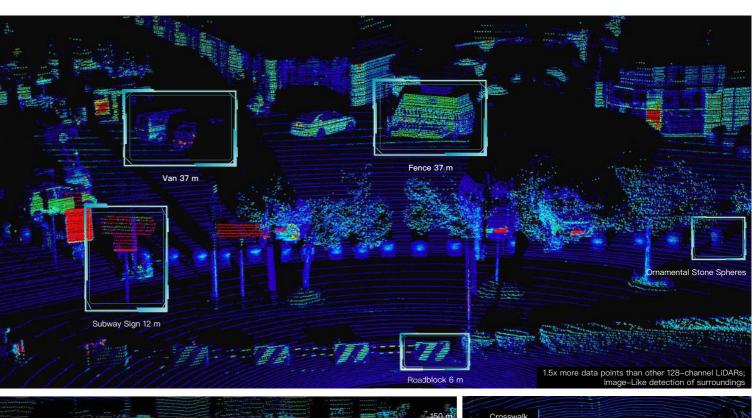
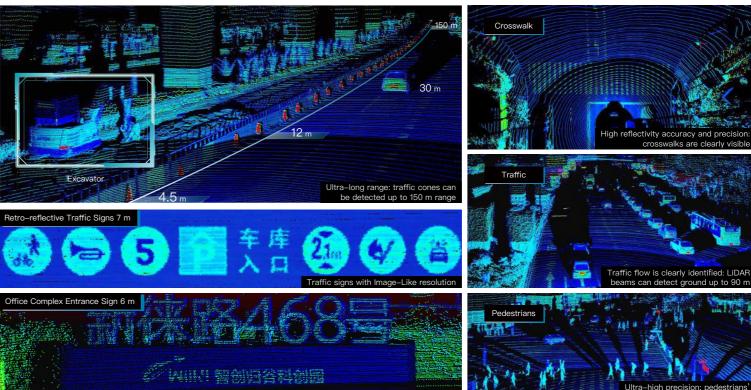
Pandar128



Point Cloud





Key Specifications

0.3 m ~ 200 m

(at 10% reflectivity)

Range Accuracy

±5 cm (0.3 ~ 1 m)

±2 cm (1 ~ 200 m)

40° (-25° ~ +15°)

Vertical FOV

Single Return:

Dual Return:

27 W

20 W

3,456,000 points/sec

6,912,000 points/sec

Data Points Generated •

(at 0.1° horizonal resolution)

(at 0.2° horizonal resolution)

Power Consumption

116.0 mm

Dimensions and Weight •

0.1° (10 Hz) 0.2° (20 Hz)

Horizontal Resolution •

0.125° (-6° ~ +2°)

Vertical Resolution

DC 9 V ~ 48 V

Operating Voltage

-40°C ~ 85°C

Hight: 123.7 mm Diameter: 118.0 mm

Weight: 1.63 kg

Operating Temperature •

Product Superiority



Pandar128

Pandar128 is a high-performance multi-beam LiDAR product highly integrated with Hesai's new breakthrough technologies



Ultra-long-range

The measurement range for objects with 10% reflectivity under 100 klux ambient light exceeds 200 m, while keeping the noise rate below 10⁻⁵



High range accuracy and precision

0.3 ~ 1 m: ±5 cm, 1 ~ 200 m; up to ±2 cm. RMSE <2 cm



Ultra-high resolution

Up to 0.1° (H) * 0.125° (V) resolution at 10 Hz high-performance mode



Interference Rejection

Every pulse has its own 'fingerprint'



Higher protection grade

IP6K9K & IP6K7



Data transmission

Automotive ethernet and ordinary ethernet both available



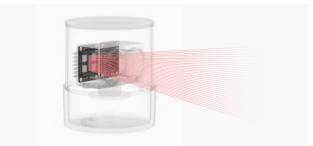
Supports gPTP protocol

Microsecond-level precision synchronization



Applications





OT128 is Hesai's next generation of L4 autonomous driving lidar, achieving a superb balance between performance, cost, and reliability. The automotive–grade OT128 can sense up to 200 meters with 360° horizontal FOV, making it the best choice for cost–effective lidar in large–scale autonomous vehicle deployment.

| Key Specifications

Range Capability	200 m (@10% reflectivity, 100 klux)	Instrument Range	0.3 to 230 m
FOV	360° (H) x 40° (V)	Point Rate	3,456,000 pts/s (single return) 6,912,000 pts/s (dual return)
Angular Resolution	0.1° (H) x 0.125° (V) (Finest)	Frame Rate	10 Hz; 20 Hz
Range Accuracy	±3 cm (3 to 200 m)	Size	Height: 132.3 mm Max. Diameter: 118.0 mm
Power Consumption	29 W	Ingress Protection	IP6K9K & IP6K7
Automotive-Grade Standards	ISO 21434 Cybersecurity, Class 1 Eye Safety, ISO 26262 ASIL B Functional Safety		

Applications







Robobus







Product Highlights

Designed for Mass Production

Modular design for high integration and automated production, balancing product performance with superior cost-effectiveness



360° Full Coverage FOV

Achieving full 360° coverage with just one primary lidar sensor makes integration easier and enhances algorithm compatibility

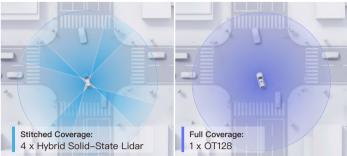
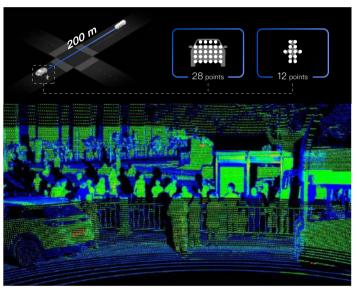


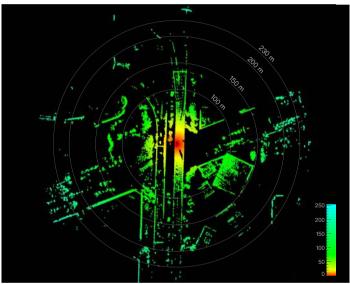
Image-Like Resolution

With a finest resolution of 0.1° (H) x 0.125° (V), OT128 enables the perception of cars and pedestrians even 200 meters away

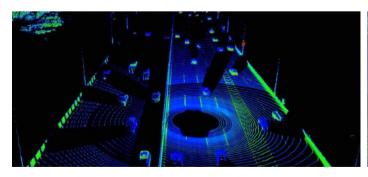


200 m Range Capability

Sensing objects over 200 m in 100 klux ambient light with 10% standard reflectivity, up to 230 m instrument range



Point Cloud





Hesai Technology Co., Ltd.

Global HQ | Building L2, Hongqiao World Center, Shanghai
US Office | 3500 W Bayshore Rd., Palo Alto, CA 94303
European Office | Charles-Lindbergh-Platz 1, 71034 Böblingen, Germany





QT128

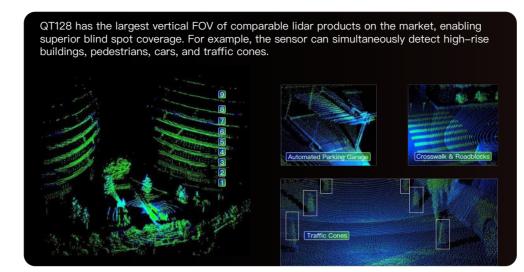
128-Channel Ultra-Wide View Lidar

- 105° Ultra–Wide Vertical FOV
- Optimized for Superior Perception
- Automotive Grade

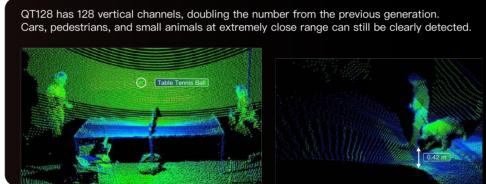


QT128

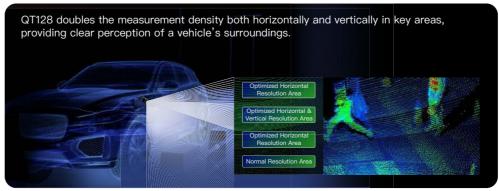
105° Ultra-Wide Vertical FOV



128 Channels, Higher Resolution



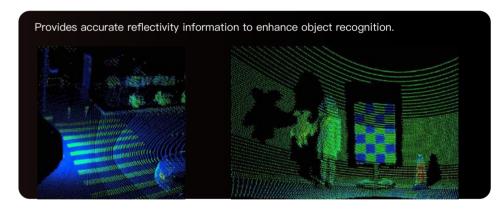
Optimized Channel Distribution, Superior Perception



Strict Automotive-Grade Reliability Testing



High-Quality Reflectivity Information



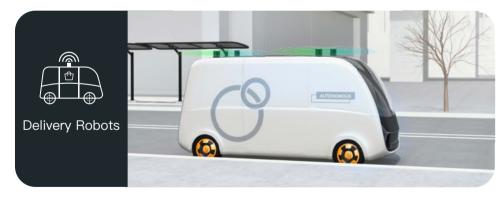
Light and Compact



Applications







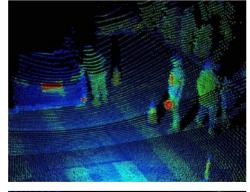


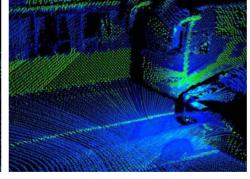
Key Specifications

128	Laser Class	Class 1 Eye Safe
0.05 to 50 m	Range Capability	20 m (at 10% reflectivity)
±3 cm (typical)	Range Precision	2 cm (typical)
360°	Resolution (Horizontal)	Finest at 0.4° (10 Hz)
105.2°	Resolution (Vertical)	Finest at 0.4°
12 W	Rated Voltage Range	DC 12 to 48 V
–40°C to 85°C	Ingress Protection	IP6K7 & IP6K9K
0.7 kg	Dimensions	Height: 83.9 mm Top/Bottom: Φ85.9/87.0 mm
	0.05 to 50 m ±3 cm (typical) 360° 105.2° 12 W -40°C to 85°C	0.05 to 50 m Range Capability ±3 cm (typical) Resolution (Horizontal) 105.2° Resolution (Vertical) 12 W Rated Voltage Range Ingress Protection

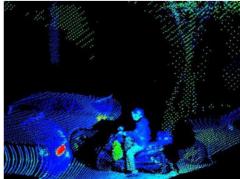


Point Cloud









Hesai Technology Co., Ltd.

Hesai Headquarters - Shanghai Office

Building L2, Hongqiao World Center, Shanghai

+86 400-805-1233

sales@hesaitech.com

Hesai Inc. - US Office

3500 W Bayshore Rd., Palo Alto, CA 94303

+1 650-665-7837

sales@hesaitech.com



Website QR Cod



WeChat QR Code

XT32/16

32/16–Channel Mid–Range Lidar

- Minimum Range of Zero
- High Precision
- Cost–Efficient



Key Specifications

Instrument Range 0.05 to 120 m	Range Capability 80 m @10% reflectivity (Channels 9 to 24)
Range Accuracy ±1 cm (typical)	Range Precision 0.5 cm (1o, typical)
Vertical FOV XT16: 30° (-16° to 15°) XT32: 31° (-16° to 15°)	Vertical Resolution XT16: 2° XT32: 1°
Frame Rate 5 Hz, 10 Hz, 20 Hz	Horizontal Resolution 0.09° (5 Hz)/0.18° (10 Hz) 0.36° (20 Hz)
Ingress Protection IP6K7	Operating Temperature -20°C to 65°C
Weight 0.8 kg	Dimensions Height: 76.00 mm Top/Bottom: Φ100.0/103.0 mm
Power Consumption XT16: 9 W (typical) XT32: 10 W (typical)	Operating Voltage DC 9 to 36 V
Clock Source GPS/PTP	Data Points Generated XT16: Single Return: 320,000 pts/sec Dual Return: 640,000 pts/sec XT32: Single Return: 640,000 pts/sec Dual Return: 1,280,000 pts/sec

Applications







Product Superiority



Outstanding Precision

Superior to comparable products on the market.



Minimum Range of Zero

XT series continuously outputs valid point cloud even when objects directly touch the lidar's cover lens. This enables the self-detection of lens smear and occlusion.



Strong Range Capability

Range detection up to 120 m, POD>90% when detecting 10% reflectivity targets at 80 m (middle 16 channels).



High-Quality Reflectivity Information

High accuracy and consistency, greater dynamic range, and provides more accurate reflectivity information.



Reliability

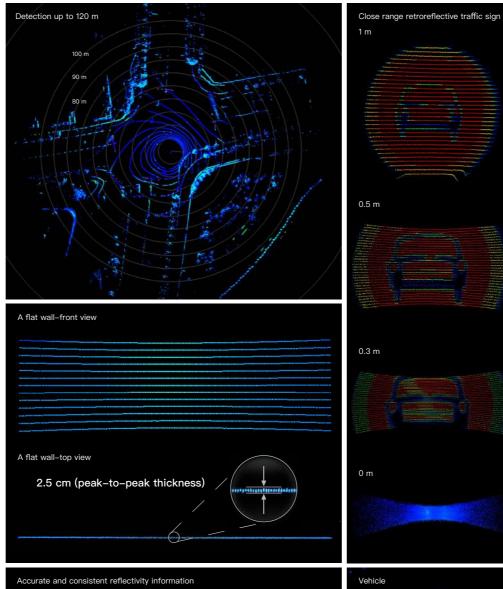
Have passed strict reliability tests including High-temperature operation, Low-temperature wakeup+operation, Thermal Shock/Air-to-Air, Vibration with Thermal Cycling, Mechanical Shock, Humid Heat Cyclic, Frost, Water and Dust Proof, and Shipping Vibration. Robust and reliable in various operation environments.



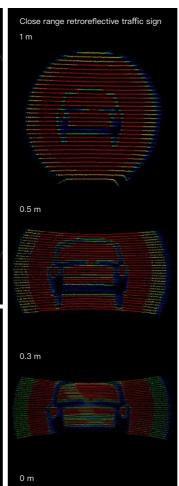
Interference Rejection

Every pulse has its own 'fingerprint', rejecting noise when multiple lidars operate closely together.

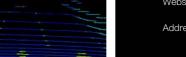
Point Cloud













Hesai Technology Co., Ltd.

Phone: 400-805-1233

Sales: sales@hesaitech.com

Website: www.hesaitech.com

Address: Building L2, Hongqiao World Centre, Shanghai







Product Superiority



Outstanding Precision

Superior to comparable products on the market.



Minimum Range of Zero

XT series continuously outputs valid point cloud even when objects directly touch the lidar's cover lens. This enables the self-detection of lens smear and occlusion.



Strong Range Capability

Range detection up to 120 m, POD>90% when detecting 10% reflectivity targets at 80 m (middle 16 channels).



High–Quality Reflectivity Information

High accuracy and consistency, greater dynamic range, and provides more accurate reflectivity information.



Reliability

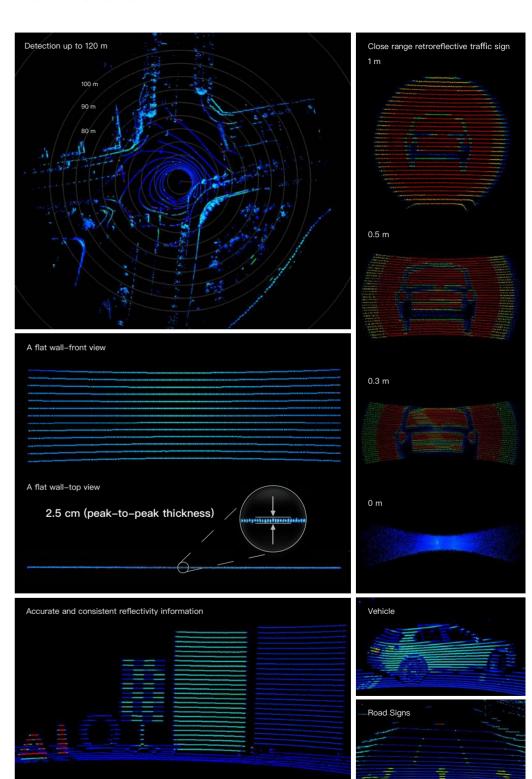
Have passed strict reliability tests including High-temperature operation, Low-temperature wakeup+operation, Thermal Shock/Air-to-Air, Vibration with Thermal Cycling, Mechanical Shock, Humid Heat Cyclic, Frost, Water and Dust Proof, and Shipping Vibration. Robust and reliable in various operation environments.



Interference Rejection

Every pulse has its own 'fingerprint', rejecting noise when multiple lidars operate closely together.

Point Cloud



XT32M2X

32-Channel LiDAR

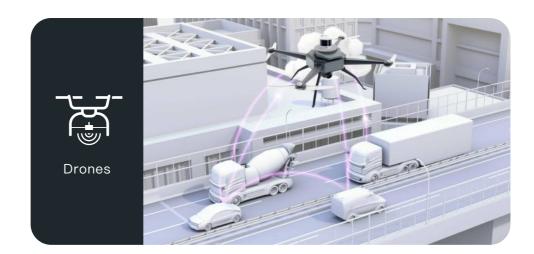
- High Precision, Long Range
- More echoes, Light Weight
- Proprietary LiDAR ASICs



Key Specifications

Instrument Range 0.5 to 300 m	Range Capability 80 m, all channels@10% reflectivity (100 klux, POD>90%)
Range Accuracy ±1 cm (typical)	Range Precision 0.5 cm (1σ, typical)
Vertical FOV 40.3° (-20.8° to 19.5°)	Vertical Resolution 1.3°
Frame Rate 5 Hz, 10 Hz, 20 Hz	Horizontal Resolution 0.09° (5 Hz) / 0.18° (10 Hz) 0.36° (20 Hz)
Ingress Protection IP6K7	Operating Temperature -20°C to 60°C
Weight 0.49 kg	Dimensions Height: 75.00 mm Top/Bottom: Φ89.0 / 93.0 mm
Power Consumption 10 W (typical)	Operating Voltage DC 9 to 36 V
Clock Source GPS / PTP	Data Points Generated Up to 3 returns Triple Return: 1,920,000 points/sec

Applications







Product Superiority



Outstanding Precision

Superior to comparable products on the market.



Light And Small

XT32M2X weighs only 490g, which is only about 60% of the weight of PandarXT, and is smaller in size, making it more suitable for drones.



Strong Range Capability

Range detection up to 300 m, POD>90% when detecting 10% reflectivity targets at 80 m (all channels), which increases the flight altitude and recognition rate of application scenarios such as power line inspection.



Interference Rejection

Every pulse has its own 'fingerprint', rejecting noise when multiple LiDARs operate closely together.



More Echoes

Up to 3 returns, and more details of trees, ground, etc. can be obtained during SLAM for natural.



Wider VFOV

The XT32M2X's VFOV has been expanded from PandarXT's 31° to 40.3°, so the field of view is wider. If the flying altitude is the same, the field of view can be increased by 32%.



Dedicated Chipsets

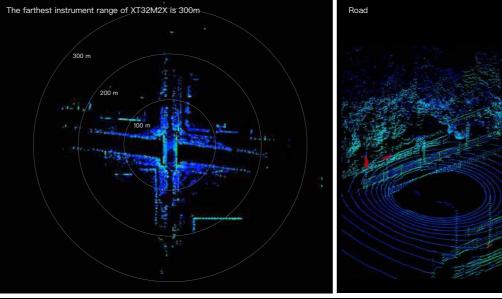
The lasers' transmitting and receiving systems are based on Hesai's self-developed ASICs, greatly improving LiDAR performance and reducing costs and production complexity.

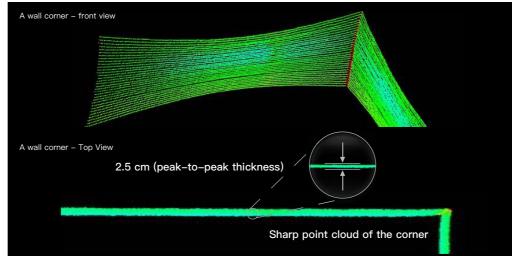


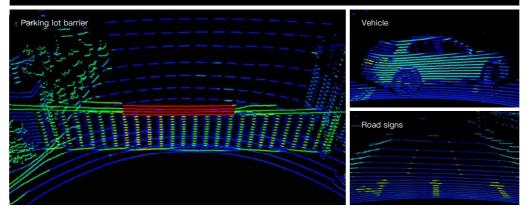
High-Quality Reflectivity

High accuracy and consistency, greater dynamic range, and provides more accurate reflectivity information.

Point Cloud









Hesai Technology Co., Ltd.

Phone: 400-805-1233

Sales: sales@hesaitech.com

Website: www.hesaitech.com

Address: Building L2, Hongqiao World Centre, Shanghai





