



• KEY ATTRIBUTES

- Ultra-Wide 180° Field of View
- 100 Meter Detection Range
- Point Cloud 3D Measurement
- 1,010,000 Data Points Per Second
- Scan Rate – 20 Times Per Second
- Hybrid Solid-State LiDAR

LIDAR

Model - GC-LIDAR-64W

Technical Specifications

SPECIFICATIONS

Model	GC-LIDAR-64W
Wavelength	905nm
Laser Class	Class 1 (IEC-60825)
Channels	64
Detection Method	TOF - Time-of-Flight Mass Spectrometry
Detection Range	100m
Detection Accuracy	± 3cm
Horizontal Field of View	180°
Verticle Field of View	40° (-25° ~ 15°)
Horizontal Resolution	0.12° / 0.16° / 0.24° / 0.36°
Verticle Resolution	0.63°
Refresh Rate	10Hz / 20Hz
Data Point Generating Rate	1,010,000 / 760,000 / 500,000 / 330,000 Points Per Second
Communication Interface	Ethernet
Communication Protocol	TCP (Byte Stream) / UDP (Json)
Output Information	Object ID, Type, Size, Speed, Presence, Location, Direction
Input Voltage	9VDC ~ 36VDC
Power Consumption	12 Watts
Anti-Inteference	Laser Code Method
AUTOSAR (AUTomotive Open System ARchitecture)	Supports Automotive Safety Integrity
Ingress Protection	IP69
Operating Temperature	-40°C ~ 105°C
Weight	~1Kg
Dimensions	116mm X 90mm X 76mm
Perception Hardware Accuracy	
Edge Device	NVIDIA® AI Computer Module
Resources	Multiple CPU & GPU Processors w/NVIDIA® CUDA Core
Nonvolatile Memory	System Programming is Retained in Nonvolatile Memory
Communication Interface	1RJ45 1GB Ethernet Port w/wireless technology options
Storage	SSD Hard Drive & Memory Card
Perception Software Accuracy	
Object Positioning	≤20cm
Speed	≤2km/h
Direction	≤2°
Probability of detection (POD) - Pedestrians	≥96.4%
Probability of detection (POD) - Vehicles	≥98.1%
Perception Capacity - Pedestrians	20m
Perception Capacity - Vehicles	40m

Technical Specifications

SPECIFICATIONS

Network User Interface:	
Configuration	Local and Remote Configuration, Monitoring & AI Training
Communication (IP) Addresses	User Programmable
Detection Zones	Configure, Edit & Display
Viewing	Real-Time & Historical
Reporting	View Detection / Activation History
NTP Server Integration	Sync over Network, User Configurable w/ Flexible Polling Intervals, Designed by URL or IP Address
Save System Configuration	Import / Export
System Health Monitoring	Yes
Central Server Management Platform - Compass:	
Host	Amazon Web Services (AWS) or Local
Security	SSL Certificates
Device Management	Individual & Groups
User Management	Permission Based
Detection Notifications	Phone, Email, Text & Push
Alarm Notifications	Phone, Email, Text & Push
Reporting	Permission Defined
General:	
Materials	Corrosion-Resistant
Fasteners	Type 304 or 316 Passivated Stainless Steel
Environmental	-40°C to 75°C Operating & Storage Temperature, 95% Humidity
API	API Provided for Integration
Network Cables & Connectors	TIA-568 Compliant
Regulatory	FCC & UL
Network	Ethernet - Fiber & Wireless Options Available
Power	120VAC Standard w/ DC Converters
Solar Power Option	Solar Panels, Battery Cabinet, Solar Charger / Inverter – 10 Day Survival w/o Sunlight
Pole Mounted Equipment Housing Form Factor	Aluminum or NEMA 4X Small Equipment Enclosure
Traffic Cabinet Equipment Housing Form Factor	19" Rack Mounted Recessed Aluminium Plate