Titan M1-R SOLID-STATE HIGH RESOLUTION LIDAR

Titan M1-R LiDAR has the longest detection range up to 600 meters. The horizontal and vertical angular resolution is 0.01°, so it is good at capturing extremely small targets in high-speed motion. The built-in high-definition camera acts as a second sensor to obtain data synchronously. This model is currently one of the most popular products among Neuvition LiDAR products in the field of rail traffic applications.
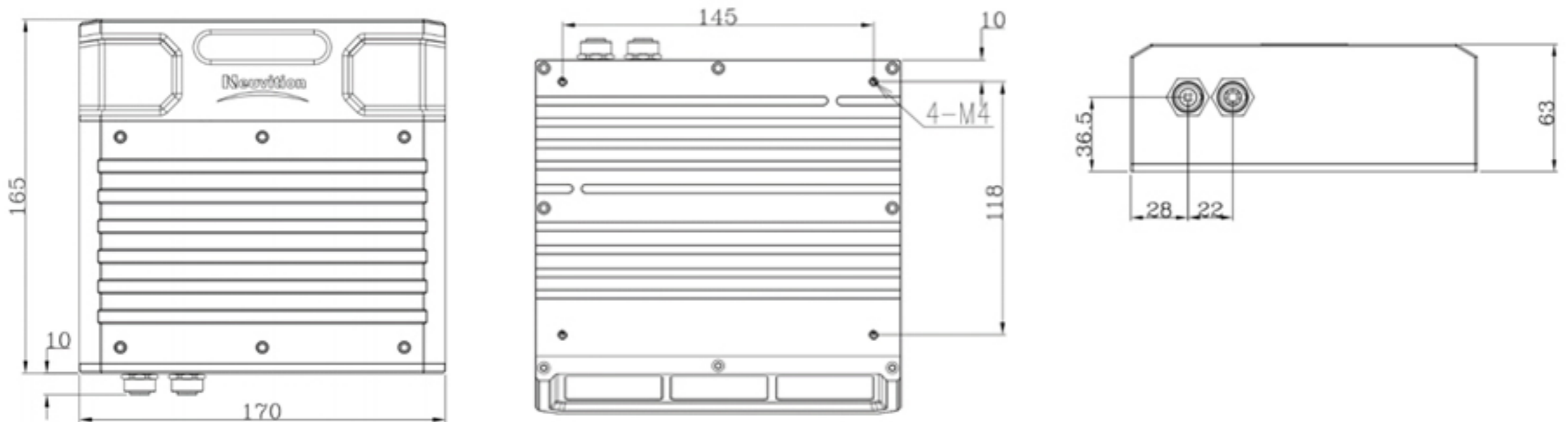
Application

V2X/Smart Road

Rail Traffic Intrusion Detection

Product Size

Specifications

Sensor Parameters

	Titan M1-R	Titan M1-RSL
Model	Titan M1-R	Titan M1-RSL
Method	ToF Measurement of Distance	
Distance	600m (Max.); Up to 300m @ 20% Reflectance, 1m Min., Precision: ±2cm Typical	
Return Mode	Multiple Returns	
Resolution	H1750, V700	H1750
Field of View	H15°, V8°	H15°
Angular Resolution	H0.01°, V0.01°	H0.009°
Frame Rate	1fps ~ 20fps	
Sampling Rate	1,000,000 Points/s (Max.)	

Laser Source

Wavelength	1550nm
Laser Product Classification	Class 1 Eye-safe
Dynamic Adjustment	Variable Density Scanning

Camera

Pixels	2M
Video Resolution	1920 x 1080 (1080p Typical)
Frame Rate	20fps

Others

Weight	1.65kg
Dimensions	170mm x 63mm x 165mm
Operating Temperature	-20°C ~ +65°C
Power Consumption	25W (Typical)
Operating Voltage	9-60V
API Interface	4-pin, M12 x 1 connector, A-Coded (power interface) 8-pin, M12 x 1 connector, A-Coded (Gigabit Ethernet interface)
IMU	Optional
Output	SDK Provided to Directly Output Data in PCL Structure
Protection Level	IP67

*Specifications are subject to change without notice. V3.4