

# LDMEC



LDMEC is the core component of the roadside sensing system, which is mainly used for roadside edge sensing and fusion data processing. LDMEC deploys the self-developed AI perception fusion algorithms in embedded high-performance GPUs, which can process data collected by roadside sensing devices such as LiDARs and cameras in real time. The perception products can effectively identify traffic participants and classify the objects, output the object's position, speed, trajectory, attributes, and other information data, and transmit the perception data to the RSU or the higher-level function development platform.

## Core Advantages

- Leading AI perception algorithms
- Integration of hardware and software and high performance
- Output of object-level perception results
- More efficient data processing
- Low latency transmission
- Supports multiple types roadside LiDARs

## Functions

Objects Perception	Object detection, tracking and classification, etc.
Data outputs	Object ID, speed, acceleration, positioning, heading, dimensions, and classification, etc.
Multi-source fusion	Feature-level fusion and object-level fusion of data acquired by LiDAR and cameras to improve perception accuracy.
Full-time sensing	independently of light conditions, 24-hour operation and stable perception in bad weather such as rain and fog.

## Specifications

Processor	NVIDIA Jetson AGX Orin 32GB
AI performance	200 TOPS
Memory	32 GB 64 bit LPDDR4 204 GB/s
USB	4×USB 3.0 TYPE A / 1×USB 2.0 TYPE C
Typical consumption	40W/60W
Operating temperature	-20°C-60°C

