

NM120 DEVELOPMENT KIT



NM120 Development Kit

The NM120 Development Kit gives developers a fast, straightforward way to explore the capabilities of Lumotive's LCM beam-steering technology integrated into a solid-state dToF lidar. It arrives ready to use with software, cables, and power accessories included, allowing you to get up and running to begin evaluating solid-state scanning performance right out of the box.

Once deployed, the NM120 enables assessment of key performance metrics such as range, accuracy, resolution, detection reliability in varied environments, and power efficiency. It can be quickly integrated into prototypes to validate system behavior and support early demonstrations through API access and compatibility with ROS or custom frameworks. Developers can also use advanced features like dynamic Regions of Interest, Virtual Lidar, HCM, HDR, and Line Scan modes to bring real-time applications to life.

Out-of-the-Box
Get up and running fast. The NM120 Development Kit comes ready with software, cables, and power essentials, making setup effortless so developers can dive into exploring and innovating with the sensor.

Evaluation
Easily assess critical performance metrics including range, accuracy, resolution, detection reliability in diverse environments, and power efficiency to understand the full capabilities of Lumotive's LCM technology for lidar sensors.

Prototyping
Integrate the NM120 into your application or use case to build proof-of-concept prototypes that validate system performance and enable early demonstrations.

Demonstration
Bring your vision to life by showcasing applications built on the ROS ecosystem or your own framework through streamlined API integration.

The NM120 is a solid-state dToF lidar designed for a wide range of applications. Its high-performance features, compact design, and exceptional reliability due to an all-chip solid-state design make these sensors highly suitable for robotics, surveillance, forklifts, and automation.

LUMOTIVE

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Product	Max Range	Range (10% R @ 100klux)	FoV (H x V)	Resolution (H x V)	Pixels	FPS
NM120	72m	40m	120° x 90°	0.47° x 0.47°	256 x 192	10-30Hz

Key Features

Software Defined: Multiple Region of Interests (ROI's) enable Virtual Lidar each with configurable functions enabling**:**

Longer Range, Higher Frame rate, and HDR

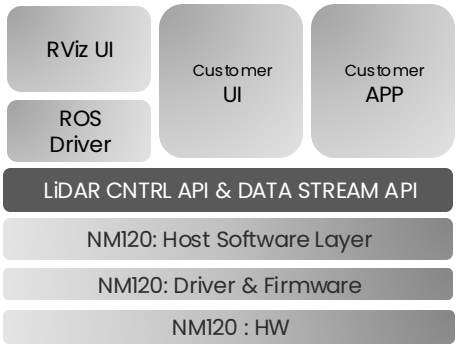
- Configure 3D Virtual Lidar for any above functions.
- 3D Dynamic ROI's Driven by Object Detection or Perception layer
- ROI for 2D Line Scans up to 900Hz.

DToF receiver: Adaps ADS6311

System Interface: Gigabit Ethernet

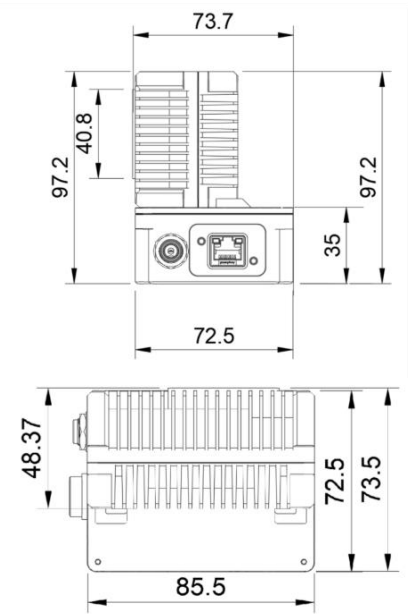
Host Requirements: x64 PC with Ubuntu Linux

Software & Tools: ROS based Rviz , REST & Data Stream API, Python, C++



Included in Development Kit:

- NM120 Solid State dToF lidar with Processor Board
- Power Adaptor (US)
- 2m CAT6 Ethernet Cable for Host Computer
- System bring up and evaluation support
- Software Runtime License for Evaluation, Prototype, and Demo



Order Information:

NM120 Development Kit	→	SKU: NM120-DK-GE
NM120 Sensor Head Only	→	SKU: NM120-DK
NM120 Processor Board	→	SKU: NM120-GE

Contact us for more details: https://lumotive.com/contact/

Lumotive's award-winning optical semiconductor solutions enable advanced sensing and perception capabilities in next-generation consumer, mobility, and industrial automation products such as mobile devices, autonomous vehicles, and robots. The company's patented Light Control Metasurface (LCM™) beam steering chips deliver an unparalleled combination of high performance, exceptional reliability, and low cost — all in a tiny, easily integrated solution.

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