

LumiCenter AI Tracker Add-On Module

LCE-AIT



Key Features

- MomentQuest Intelligent Forensic Search
- Human/Vehicle Detection
- Heat Map
- Queue Detection

Certifications and Compliance

- NDAA Compliant

Supported by LumiCenter

- Plus
- Max (Included)

Overview

This add-on module enables AI-driven features (MomentQuest Intelligent Forensic Search, human/vehicle detection, data reports, heat map generation, queue detection) for LumiCenter Plus. This module is included with LumiCenter Max.

Key Technologies

MomentQuest Intelligent Forensic Search is an advanced AI-powered search system that efficiently analyzes video footage and detect relevant moments for further investigation.

Human/vehicle detection automatically detects human and vehicle presence, enhancing the security system's ability to respond to critical events.

LumiCenter data reports can be generated to support decision-making and operational analysis.

Heat maps show a visual representation of high-traffic areas to optimize resource allocation and improve situational awareness.

Queue detection alerts to long queues or crowded areas to assist in operational management and optimize resource deployment.

System Requirements and Technical Specifications

Consult the information below to verify the specifications and conditions the add-on module requires to perform properly.

Cameras

Below are the camera requirements for the add-on module to perform properly.

- The minimum required camera resolution is 640 × 360 pixels. The optimal resolution is 1280 × 720. Resolutions above 1920 × 1080 are not recommended due to significantly increased system resource usage.
- The camera's video stream must have a frame rate of at least 8 fps to handle standard tasks effectively.
- It is recommended to use color images when using a neural filter as black-and-white images decrease recognition quality.
- The detector may not operate correctly if the frame was masked prior to being added to LumiCenter by an IP camera or similar methods.
- Neural trackers may not operate correctly when using a fisheye camera.

Lighting

Below are the lighting requirements for the add-on module to perform properly.

- The minimum lighting required is 100 lux. If there is insufficient or excessive lighting, stable operation of the analytics is not guaranteed.
- Abrupt lighting changes may cause operational disruptions.

Scene and Camera Angle

Below are the lighting requirements for the add-on module to perform properly.

- Moving objects must be visually distinguishable from one another.
- The background cannot abruptly change and must remain static for the majority time.
- Moving objects are minimally obscured by static objects (i.e., trees, columns).
- Reflective surfaces and sharp shadows from moving objects must be masked.
- Camera movement must not result in image offsets greater than 1% of the frame size.

Ordering Information

LumiCenter License

Each license enables video capture, display, record, transmit and playback of one video channel from an IP camera or IP device. Additional functionality is included (I/O, audio, PTZ).

SKU	Product
LSC-PLSV	LumiCenter Plus Version
LSC-MAXV	LumiCenter Max Version

LumiCenter Add-On Modules

Each video channel requires a LumiCenter license to support add-on modules.

SKU	Add-On Module	Description
LCE-AIT	AI Tracker Channel	Enables AI-driven features (MomentQuest Intelligent Forensic Search, human/vehicle detection, data reports, heat map generation, queue detection) for LumiCenter Plus. ① This module is included with LumiCenter Max.