

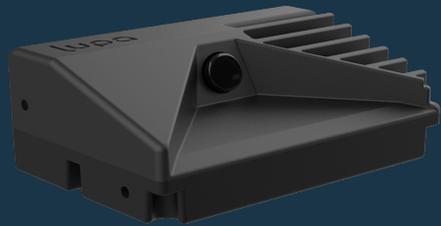


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EagleCAM product specification



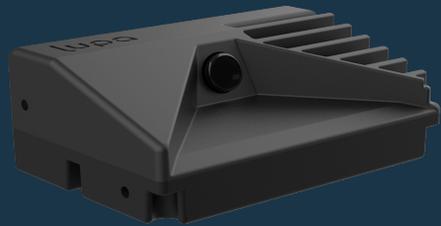
Product spec



EagleCAM base
EagleCAM mid

System Function	base	mid	Comments	Related Requirements
AEB	✓	✓	VRUs supported, with warning (FCW)	Front radar optional for fusion option
LKA	✓	✓	LCC / LDP / LDW supported	EagleCAM only
ACC	✓	✓	Camera only vehicle detection up to 150m	Front radar optional for fusion option
TSR	✓	✓	Traffic light detection supported on EagleCAM mid	EagleCAM only
ICA / TJA	✓	✓	Camera only solution supported	Front radar optional for fusion option
HBA	<i>optional</i>	✓	Use case needs to be aligned for EagleCAM base	EagleCAM only
BSD	✓	✓	EagleCAM mid supports side/rear camera fusion	Rear corner radars
LCA	✗	✓	EagleCAM mid supports side/rear camera fusion	Rear corner radars
HWP	✗	✓	Highway assist supports hazard detection	Five radars, 1x front, 4x corner
360° view	✗	✓	Top-view and 3D view supported	4x satellite cameras (front, side, rear)
Valet parking	✗	✓	Ultrasonic sensor fusion supported	Ultrasonic sensors (front, side & rear)
HMI	✓	✓	Video out for rear camera integration	External display or headunit
OBD	✓	✓	Full diagnostics supported	
OSEK	✓	✓	OSEK and AUTOSAR CAN network management	
OTA	✓	✓	Application and OS upgrade supported (CAN & Ethernet)	External TCU / TBOX

Product spec

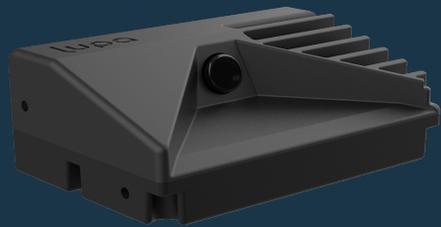


EagleCAM base

Characteristic	Comments
Field of view	up to 100° HFOV
Imager	1.7MP or 2.45MP RCCB Imager
SOC platform	Renesas V3M
Operating System	Default Version: Linux + FreeRTOS Functional Safety Version: QNX + AUTOSAR
Compute power	2x A53 @ 800MHz + Dual R7 (Lockstep) @ 800MHz + CNN + 4x IMP + 2x Cve accelerators
Interfaces	1x camera output (GSML or FPD-Link III) 2x CAN-FD 1x 100/1000BASE-T1 Ethernet (optional)
Voltage	12V or 24V (min. 4,5V max. 42V)
Power	< 7W (max, depending on use-case)
Environment	-40°C to 95°C, IP5K2 up to IP6K7
Safety Level	ASIL-B
Size	120 mm x 60 mm x 40 mm (L*W*H), other on request

Perception performance	
NCAP	NCAP 2020 compliance
	Vehicle detection
	Pedestrians / bike detection
	Ego lane detection
	Limited traffic sign detection
	NCAP 2022 compliance
	AEB xTAP scenarios
ACC	AEB junction assist scenario
	Vehicle detection
	Vulnerable road user detection
TSR	Multiple lanes detection
	Traffic sign detection
HBA	High-beam assist

Product spec



EagleCAM mid

Characteristic	Comments
Field of view	up to 100° HFOV
Imager	1.7MP or 2.45MP RCCB, optional 8Mpixel
SOC platform	Renesas V3H
Operating System	Default Version: Linux + FreeRTOS Functional Safety Version: QNX + AUTOSAR
Compute power	4x A53 @ 1000MHz + Dual R7 (LockStep) @ 800MHz + CNN + 5x IMP + 5x Cve accelerators
Interfaces	5x camera input (GSML or FPD-Link III) for 360° view 1x camera output (GSML or FPD-Link III) Up to 3x CAN-FD Up to 2x 100/1000BASE-T1 Ethernet
Voltage	12V or 24V (min. 4,5V max. 42V)
Power	< 12W (max, depending on use-case)
Temperature	-40°C to 95°C, IP5K2 up to IP6K7
Safety Level	Up to ASIL-C
Size	120 mm x 60 mm x 40 mm (L*W*H) , other on request

Perception performance	
NCAP	NCAP 2020 compliance
	Vehicle detection
	Pedestrians / bike detection
	Ego lane detection
	Limited traffic sign detection
	NCAP 2022 compliance
	AEB xTAP scenarios
	AEB junction assist scenario
ACC	Vehicle detection
	VRUs detection
	Multiple lanes detection
TSR	Traffic sign detection
	Traffic lights detection
HBA	High-beam assist
Advanced features	Hazards detection
	Stop lines, zebra crossings, and road markings
	Bumps, and potholes detection
	Visual landmarks - For localization
	Animals & general objects

A nighttime photograph of a city street, likely in Japan, showing light trails from cars and illuminated buildings. The scene is viewed from an elevated perspective, looking down a multi-lane road with an overpass. The sky is dark, and the city lights create a warm, golden glow.

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“In the new world, it is not the big fish which eats the small fish, it’s the **fast fish** which eats the **slow fish**”

Klaus Schwab
Founder and Executive Chairman
World Economic Forum

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