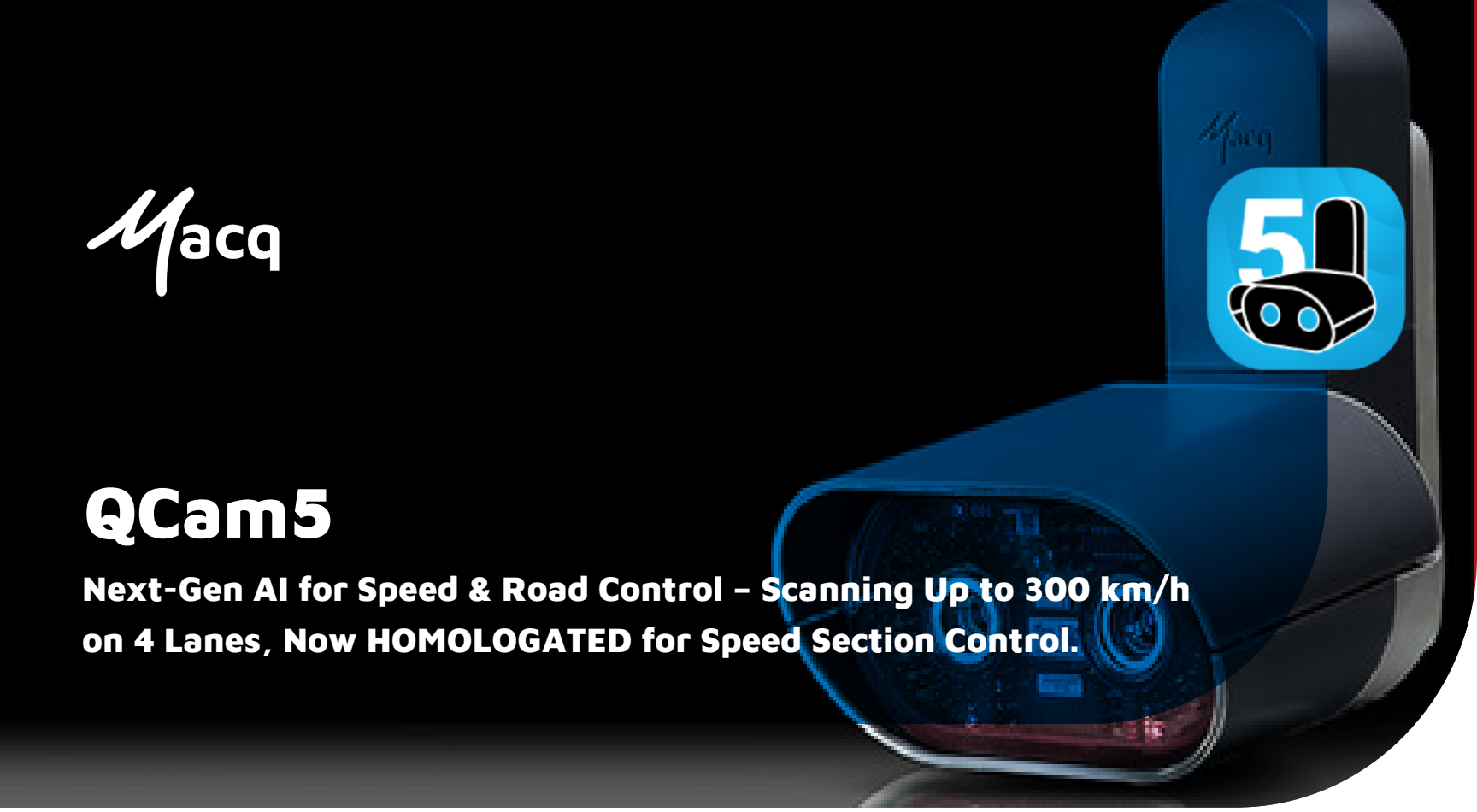

QCam5

Next-Gen AI for Speed & Road Control – Scanning Up to 300 km/h on 4 Lanes, Now HOMOLOGATED for Speed Section Control.

Integrating the latest **cutting-edge technologies** (deep learning-based algorithms), the QCAM5 camera delivers **unprecedented number plate recognition** capabilities. Additionally, its outstanding image resolution and a **unique set of functionalities** designated to provide further **vehicle characterization** makes this product the “best in class” within its category.

The QCAM5 camera can operate on **1, 2, 3 or 4 lanes** and is able to differentiate **all kind of vehicles** (e.g. cars, trucks, busses, motorcycles, bicycles, trailers, etc.), **objects and persons.**

Moreover, it also integrates in option a **“Make & Model”** recognition feature, as well as a **“vehicle colour”** characterization. Both features are invaluable in finding vehicles and closing the current gap in similar product offerings, as these features, when available, typically require additional hardware and software.

The QCAM5 camera is also able to calculate an **instantaneous speed** estimate for each vehicle travelling within its field of view.

The whole QCAM5 camera technology is embedded in a **small footprint** - but well-designed - housing that discretely blends into urban environments. All details have been carefully thought and engineered to facilitate its installation and deployment: **a miniaturized motorization within the support arm allows remote alignment,** removing the burden of relying on an aerial lift truck for final mechanical setup. A motorized lens is also incorporated into the system.

Main Technical Characteristics

- 5 MP dual high-sensitivity CMOS sensors (B/W & Color)
- Processor: ORIN NX
- Vehicle speed detection up to 300 km/h
- Connectivity: Ethernet, Wi-Fi, 4G, 5G
- GNSS included
- Motorized support arm (tilt & pan)
- VARI-FOCAL 12mm - 50mm with P-FOCUS and P-IRIS
- PSU: PoE++, 24V DC 2.0A
- Weight: 3.8kg
- IP68 protection & IK10
- CE conformity
- ONVIF Compatibility

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Technical Data

OVERALL PERFORMANCE	
Number of Monitored lanes	Up to 4 lanes
Maximum speed of detected objects	Up to 300 km/h
Working distance	Up to 70 m (day & night)
Vehicle detection accuracy	>99 %
Plate recognition accuracy	>99 %
Classification	Combines ANPR and slow mobility detection, identifying all vehicle types (cars, trucks, buses, motorcycles, bicycles, trailers, pedestrians, etc.) while also supporting radar integration for speed enforcement, red light detection for road and rail infractions, and optional vehicle classification (e.g., taxi, police, ambulance) for enhanced traffic management and safety.
Make & Model recognition	Yes (optional)
Vehicle color recognition	Yes (optional)
ADR recognition	Yes (optional)
Instant speed detection	Yes (optional)
Driver attributes: Seatbealt, phone detection, ...	Yes (optional)
HARDWARE & CONNECTIVITY	
2 Sony CMOS sensors IMX 567, Preguis Series (ANPR & context camera)	5 MP
VARIFOCAL	12-50 mm
P-FOCUS	Yes
P-IRIS	Yes
Infra-red Illuminator	12 Wide angle IR LED with Dome lens 855nm
Storage SSD	256 GB / 512 GB / 1 TB / 5G
GNSS	Yes
3G / 4G / 4G LTE	Yes (optional)
Wi-Fi, IEEE 802.11a/b/g/n/ac, 2.4 / 5 GHz	Yes
Ethernet RJ45	Yes
Pan & tilt remote control	Yes, via motorized arm
SOFTWARE & IMAGE PROCESSING	
OS	Ubuntu (Linux for Tegra)
Encryption	AES256
Automatic white balance & backlight attenuation	Yes
Streaming	RTSP, Color & B/W H264
Compression	JPEG
Time	NTP & GNSS synchronization
Communication protocol	HTTP, HTTPS,MQTT,SNMP
External & Internal I/O trigger	Yes (optional)
Data transmission	JSON, SNMP, UTMC
ONVIF compatibility	Profile S
System integration	M³ Platform, via SDK (available upon request)
MECHANICAL & CONFORMITY	
Dimensions	188 x 256 x 270 mm
Weight	3.8 kg
Power Supply	24V DC 2.0A (35W only) & PoE++ (optional)
Solar panel & battery autonomus power supply	Available upon request
CE conformity	Yes
IP /IK rating	IP68, IK10
Operating temperature	-25°C to +65°C
Operating humidity	10% to 95%

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