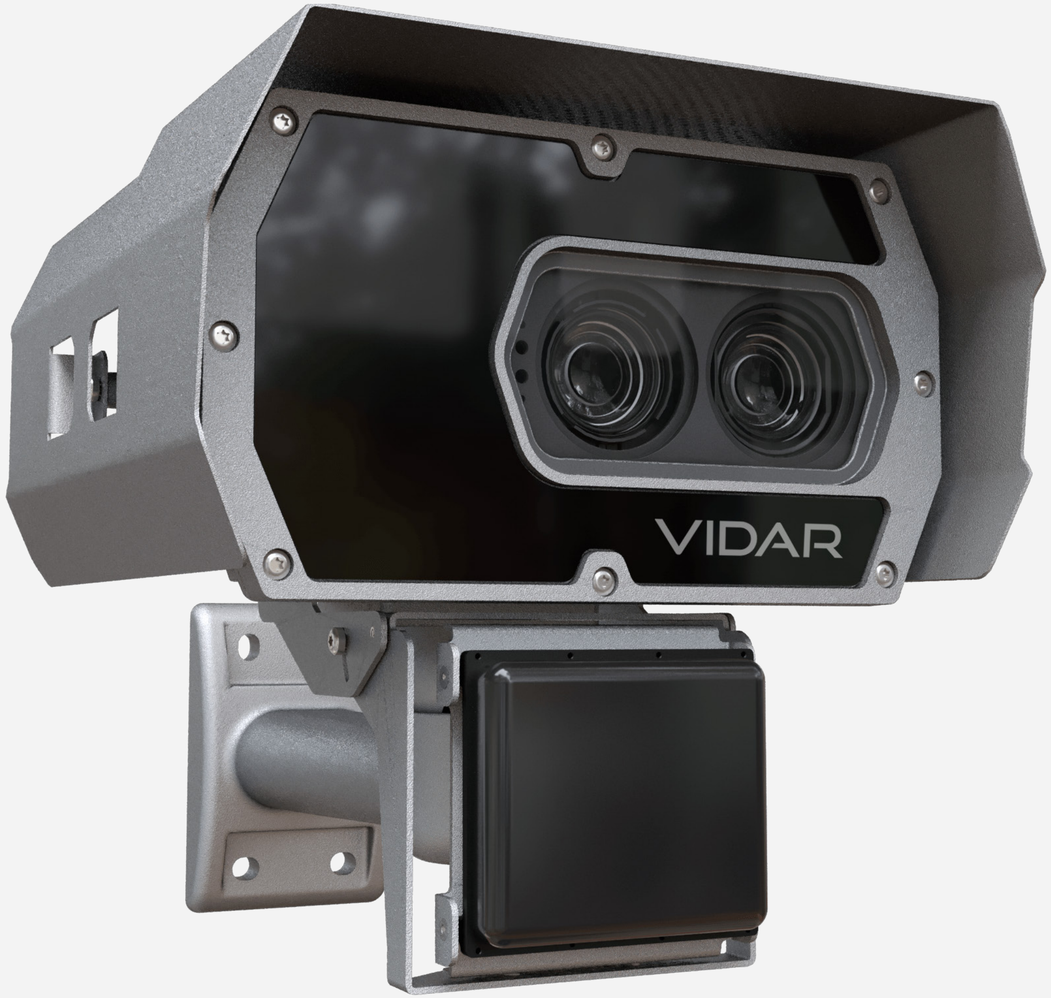


Vidar Speed Camera for Speed Measurement and ANPR

Certified Speed Measurement on Multiple Lanes

Vidar Speed cameras include onboard ANPR and are equipped with a multilane, multi-object tracking 4D radar for speed measurement certified by METAS, as well as object separation based on speed, distance, horizontal and vertical angles, making it ideal not only for multilane traffic scenarios but also for stop-and-go traffic at busy intersections.

Unmatched Detection Accuracy

Together with the radar module, Vidar Speed is capable to cover up to 2 lanes and detect 64 objects simultaneously. Vehicles with a speed difference of at least 0.35 m/s can be told apart. See layout comparison on next page regarding simultaneous lane coverage.

METAS-Approved Speed Measurement

Vidar Speed can capture every passing vehicle with 99% detection rate during optimal conditions. The radar module measures vehicle speed up to 320 km/h (200 mph), certified by the Swiss Federal Institute of Metrology (METAS), therefore it’s applicable for direct enforcement use cases.

Object Categorization

Vidar Speed categorizes vehicles in the following categories: pedestrian, bicycle, motorbike, passenger car, transporter, truck/bus, long truck.

Intelligent, Convenient, and Robust Design

A Camera Born for the Road—Any Road

Vidar Speed is designed for long-lasting operation both inside and outside. The camera's IK10 and IP67 certified, 100% aluminum cast design, and a passive cooling make Vidar vandal- and weatherproof, requiring virtually no physical maintenance.

Vidar Speed features a light sensor for automated illumination- and imaging settings—all available remotely—so images remain crystal clear even under extreme outer conditions. Quality and precise imaging is further guaranteed by global shutter sensors, optical and digital zoom, and focus & iris lenses.

Industry-Leading ANPR

Powered by Carmen®

Automatic number plate recognition (ANPR) is performed onboard the camera itself via a dedicated quad-core processor running Adaptive Recognition's industry-leading AI-based optical character recognition solution, Carmen®.

With Carmen®, license plates are recognized instantly without interrupting the camera's operation. You also get coverage of 38,000+ plate types from 160+ countries and 20 regions.

CARMEN®

Vidar Speed Camera

Camera

Model	Vidar Speed 2xFHD LT	Vidar Speed 5MpHDx LT
Image processing unit	UltraScale	UltraScale

Imaging

Resolution	Sensor 1&2: 2048x1536	Sensor 1: 2472×2064 Sensor 2: 1440×1080
Max FPS	60 FPS	45 on sensor 1 or 120 on sensor 2
Sensor	Sensor 1 & 2: Color, Global Shutter	
Day/Night switch	Automatic brightness control with predefined traffic environments or manual	
Lens	Motorized zoom and focus, remotely adjustable	
Lens mount	Custom mount	
Angle of View	Optics 1&2: Wide: 26° x 20° Tele: 8° x 6°	Optics 1: Wide 26° × 20° Tele: 8° × 6° Optics 2: Wide: 54° × 42° Tele: 3.4° × 2.5°
Optical Zoom	Optics 1&2: 3.3x	Optics 1: 3.3× Optics 2: 18×
Focal length	Optics 1&2: Variable, 15 – 50 mm	Optics 1: Variable, 15 – 50 mm Optics 2: Variable, 4.8 – 84.6 mm

ANPR

ANPR range	10 – 20 m / 33 ft. – 65 ft	10 – 20 m / 33 ft. – 65 ft
Maximum ANPR range (at optimal conditions)	40 m	50 m / 164 ft
Maximum ANPR range at "0" LUX	35 m / 115 ft	
Vechicle speed range (at optimal conditions)	0 km/h – 300+ km/h / 0 mph – 190+ mph	
Maximum road width covered (at standard license plate size)	8 m / 26 ft	10 m / 33 ft

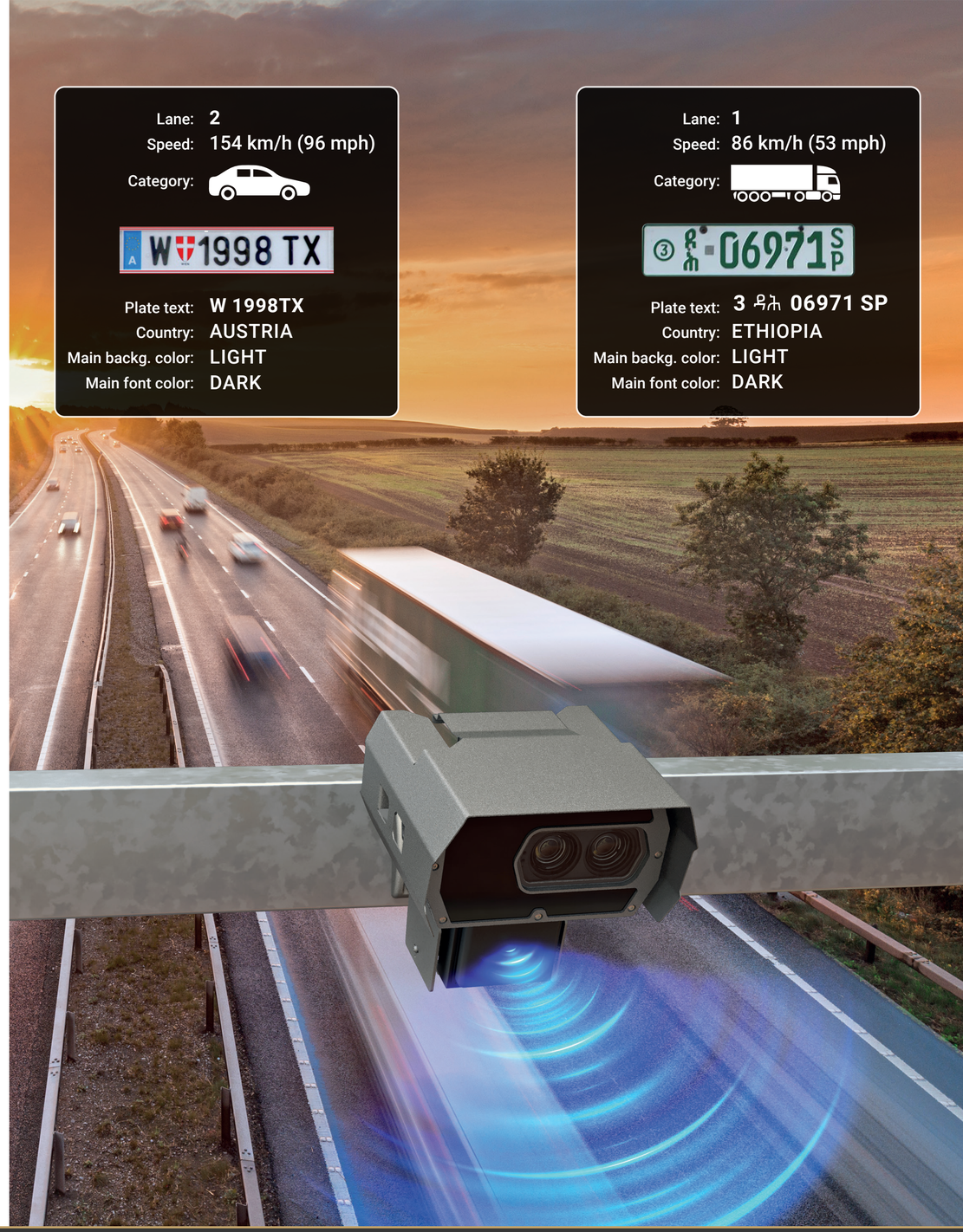
Onboard Intelligence

Carmen ANPR onboard	✓
ANPR Cloud compliant	Coming soon
GDS compliant	✓
MMR + Color	✓
Vehicle category	✓
Video analytics	License plate detection, vehicle direction detection, category
ADR recognition	✓

Radar

Vehicle speed data	METAS-certified
Measurement range	0 – 320 km/h (199 mph)
Measurement accuracy	±1 km/h (0.6 mph) or ±1 % (the bigger of)
Opject tracking	Position, direction, angle, speed
Object categorization	7 categories: pedestrian, bicycle, motorbike, passenger car, van/minibus, truck/bus, long truck
Measurement frequency	24 GHz*
Sample rate	75 ms
Maximum number of lanes covered	2
Maximum number of objects tracked simultaneously	64

*77 GHz variant is also available



Vidar Speed Camera

Illumination

Wavelength	850 nm
Illumination modes	Synchronized or continuous
Illumination beam-angle	22°
Variable intensity	Adjustable in 100 increments, parity flash (different intensity for odd and even frames)

Processing & I/O

ANPR Processing unit	ARM Quad-core 1.4 GHz
Communication protocols	ONVIF, ARP, TCP/IP, DHCP, NTP, FTP, HTTP, RTSP, HTTPs, SFTP, DNS, SNMP, SSL/TLS, NTCIP
I/O ports	12-pin (UART, GPIO, USB, RS232)
In-built Laser Trigger	8 mRad Point Laser
Laser wavelenght & safety class	905 nm CLASS 1 (60825-1 2014)
Radar for triggering	Optional, 77 GHz MultiLane Radar
Certified vehicle speed data	Optional

Storage

Internal storage size and type	32 GB SSD	
Stored number of events (Internal)*	approx. 50000	approx. 40000
Event package size for external upload*	350 - 500 kb	400 - 550 kb
External storage type	FTP, SFTP, HTTP, HTTPS	

*With default settings

Electrical Data

Power requirement	24 - 28 V AC, min. 2A	
Typical power consumption	24 W	26 W
Maximum power consumption	60 W	65 W

Mechanical Data

Operating temperture*	-45°C – +70°C (-49°F – +158°F)
IP&IK rating	IP67, IK10
Dimensions (LxWxH)	250 x 251 x 145 mm / 9.84" x 9.88" x 5.7"
Weight	4.5 kg / 9.92 lbs
In the box	Camera, bracket, shield, Quick Install Guide

Accessories

M12 power cable, Ethernet cable, Junction Box, External IR-light

Certificate

Made in EU, NDAA compliance

*Internal

Technical specifications are subject to change without prior notice. This document does not constitute an offer.

Contact

ADAPTIVE RECOGNITION

www.adaptiverecognition.com

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