ANPR/ALPR CAMERAS FOR
TRAFFIC MONITORING

ANPR + MMR RESULTS:

AF 42 885

Number plate:	AF42885
Nationality:	EU-Denmark
Make:	BMW
Model:	320d
Color:	Blue
Speed:	108 Mph / 174 kmh
Blacklist:	---NO---
Recognition time:	08-03-2020 19:20+00:00

VIDAR
4TH GENERATION, MODULAR ANPR CAMERA

3 YEAR WARRANTY

Vidar is a highly sophisticated ANPR camera line with up to **120 FPS, Carmen-based onboard ANPR, MMR, and laser-sharp vehicle detection.**

Most of our Vidar models can run onboard Carmen-powered ANPR with superior accuracy, along with vehicle make, model, and color recognition, to quickly gather vehicle identification information on the spot.

Each unit contains passive cooling and are in IP67-rated housing to ensure long-lasting performance in all environments and weather conditions.

Integrated illumination, advanced brightness control, and sensor(s) with up to 120 FPS work together to capture high-quality images of reflective and non-reflective plates.

Vidar is also natively GDS-ready, making it an ideal choice for ITS customers.

TOLL COLLECTION

JOURNEY TIME MEASUREMENT

TRAFFIC MONITORING

ACCESS CONTROL

TRAFFIC MONITORING

BORDER CONTROL

Main Benefits

• Standalone traffic solution
• Onboard Carmen® ANPR and MMR
• Built-in synchronized illumination for superior imaging at any traffic speed
• Up to 120 FPS video processing for a selected sensor
• Variable motorized optics for easy fine-tuning
• Built-in laser trigger for precise vehicle detection
• High-quality automated manufacturing using robotic assembly

Adaptive Recognition **America**
Adaptive Recognition **Hungary**
Adaptive Recognition **Nordic**
Adaptive Recognition **Singapore**

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WWW.ADAPTIVERECOGNITION.COM

Specifications

• dual motorized optics • high-performance 4-core ANPR processor • built-in laser trigger • MMR + color • up to 120 FPS
• reads reflective/non-reflective plates simultaneously • overview lens • direction detection • wealth of features
• 850 nm IR illumination • spectacular night-time performance • natively GDS-ready • vehicle categorization

	Vidar HDx	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD LT	Vidar Smart 5MpHDx LT
Image processing unit	UltraScale	UltraScale	UltraScale	UltraScale	UltraScale

Imaging

	Vidar HDx	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD LT	Vidar Smart 5MpHDx LT
Resolution	1440 x 1080	Sensor 1&2: 1440×1080	Sensor 1&2: 2048×1536		Sensor 1: 2472×2064 Sensor 2: 1440×1080
Max FPS	120 FPS	120 FPS*	60 FPS*		Sensor 1: 45 FPS Sensor 2: 120 FPS
Sensor	Color, Global Shutter	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	Wide: 54° x 42° Tele: 3,4° x 2,5°	Optics 1&2: Wide: 54° x 42° Tele: 3,4° x 2,5°	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	18×	Optics 1&2: 18×	Optics 1&2: 3.3×		Optics 1: 3.3× Optics 2: 18×
Focal length	Variable 4.8 – 84.6 mm	Optics 1&2: Variable 4.8 – 84.6 mm	Optics 1&2: Variable 15 – 50 mm		Optics 1: Variable, 15 – 50 mm Optics 2: Variable, 4.8 – 84.6 mm

* On selected sensor and resolution.

ANPR

	Vidar HDx	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD LT	Vidar Smart 5MpHDx LT
ANPR range	4 m – 20 m / 13 ft. – 65 ft.			10 – 20 m / 33 ft. – 65 ft.	
Maximum ANPR range (at optimal conditions)	50 m / 164 ft.			40 m / 131 ft.	50 m / 164 ft.
Maximum ANPR range at "0" lux*	35 m / 115 ft.				
Vehicle speed range (at optimal conditions)	0 km/h – 300+ km/h / 0 mph – 190+ mph				
Maximum road width covered (at standard license plate size)	6 m / 20 ft.			8 m / 26 ft.	10 m / 33 ft.

* In the case of reflective license plates.

On-Board Intelligence

	Vidar HDx	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD LT	Vidar Smart 5MpHDx LT
Carmen ANPR onboard	–	✓	✓	✓	✓
ANPR Cloud compliant	soon	soon	soon	soon	soon
GDS compliant	✓	✓	✓	✓	✓
MMR + Color	–	✓	✓	✓	✓
Vehicle category	–	✓	✓	✓	✓
Video analytics	Image preselection (license plate detection)	License plate detection, vehicle direction detection, vehicle category			
ADR Recognition	–	✓	✓	✓	✓

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	Vidar HDx	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD LT	Vidar Smart 5MpHDx LT

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)				

*Other Vidar models are available with 760 nm (near infrared) and white built-in illumination as well

Processing & I/O

ANPR Processing unit	–	ARM 64-bit Quad-Core @ 1.4 GHz			
Communication protocols	ONVIF, ARP, TCP/IP, DHCP, NTP, FTP, HTTP, RTSP, HTTPs, SFTP (Smart models only), DNS, SNMP, SSL/TLS, NTCIP				
I/O ports	12-pin (UART/GPIO/USB/RS232)				
In-built Laser Trigger	–	–	8 mRad Point Laser		
Laser wavelength & safety class	–	–	905 nm CLASS 1 (60825-1 2014)		
Radar for triggering	–	–	–	–	Optional, 4D MultiLane Radar
Certified vehicle speed data	–	Optional	Optional	Optional	Optional

Storage

Internal storage size and type	–	32 GB SSD			
Stored number of events (Internal)*	–	approx. 90000	approx. 90000	approx. 50000	approx. 40000
Event package size for external upload*	~ 200 kb	250 - 400 kb	250 - 400 kb	350 - 500 kb	400 - 550 kb
External storage type	FTP, HTTP, SMTP	FTP, SFTP, HTTP, HTTPS	FTP, SFTP, HTTP, HTTPS	FTP, SFTP, HTTP, HTTPS	FTP, SFTP, HTTP, HTTPS

*With default settings

Electrical Data

Power requirement	24 - 28 V AC; min. 2A				
Typical power consumption	11 W	18 W	20 W	20 W	20 W
Maximum power consumption	30 W	50 W	60 W	60 W	65 W

Mechanical Data

Operating temperature*	-45°C – +70°C (-49°F - +158°F)				
IP&IK rating	IP67, IK10				
Dimensions (L×W×H)	250x251x145 mm / 9.84″×9.88″×5.7″				
Weight	4.5 kg / 9.92 lbs				
In the box	Camera, bracket, shield, Quick Install Guide				

* Internal

Accessories

M12 power cable, Ethernet cable, I/O Cable, 4D MultiLane Radar, Junction Box, External IR-light

Certificate

Made in EU, NDAA compliant

CE   FC   UL   RoHS   ONVIF

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

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