

# VIDAR

**Confident license plate recognition anytime and anywhere.**

The ever-changing light conditions, temperature, and weather won't affect Vidar's operation.



ADAPTIVE RECOGNITION

## DISTANCE RANGE

	Vidar HDx	Vidar HDx LT	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD Smart LT
Optimal ANPR range at ambient light	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	10 m – 20 m / 33 ft - 65 ft
Optimal ANPR range at "0" LUX	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	4 m – 20 m / 13 ft. - 65 ft.	10 m – 20 m / 33 ft - 65 ft
Maximum ANPR range at optimal conditions	50 m / 164 ft.	50 m / 164 ft.	50 m / 164 ft.	50 m / 164 ft.	50 m / 130 ft
Maximum ANPR range at "0" LUX, optimal conditions	35 m / 115 ft.	35 m / 115 ft.	35 m / 115 ft.	35 m / 115 ft.	35 m / 115 ft

## ON-BOARD INTELLIGENCE

	Vidar HDx	Vidar HDx LT	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD Smart LT
CARMEN® ANPR	-	-	Included	Included	Included
Dangerous Goods Recognition (HAZMAT)	-	-	With the required engine	With the required engine	With the required engine
Vehicle Detection (Virtual Loop & Plate Finder)	Included	Included	Included	Included	Included
Position determination	Included	Included	Included	Included	Included
Motion detection	Included	Included	Included	Included	Included

Private Zone	Included	Included	Included	Included	Included
Trigger sources	GPIO/ UART / Software trigger (controlled via HTTP request) / Video Analytics	GPIO/ UART /Software trigger (controlled via HTTP request) / Video Analytics / Laser	GPIO/ UART / Software trigger (controlled via HTTP request) / Video Analytics	GPIO/ UART / Software trigger (controlled via HTTP request) / Video Analytics / Laser	GPIO/ UART / Software trigger (controlled via HTTP request) / Video Analytics / Laser

## IMAGING

	Vidar HDx	Vidar HDx LT	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD Smart LT
Sensor color mode	Color	Color	Color	Sensor 1 & 2: Color	Sensor 1 & 2: Color
Resolution (H × V pixels) & framerate	1440 x 1080: 30fps	1440 x 1080: 30fps	1440 x 1080: 30fps	Sensor 1 & 2: 1440 x 1080: 30fps	Sensor 1 & 2: 2048 x 1536: 20fps
Sensor type	CMOS	CMOS	CMOS	Sensor 1 & 2: CMOS	Sensor 1 & 2: CMOS
Shutter speed	1/22727 - 1/62 sec	1/22727 - 1/62 sec	1/22727 - 1/62 sec	Sensor 1 & 2: 1/22727 - 1/62 sec	Sensor 1 & 2: 1/22727 - 1/20 sec
(Full resolution, Max. framerate)	(44-16000 μs)	(44-16000 μs)	(44-16000 μs)	(44-16000 μs)	(44 - 49800 μs)
Day mode / night mode	Intelligent light sensor and video analytics controlled auto-switching day/night mode	Intelligent light sensor and video analytics controlled auto-switching day/night mode	Intelligent light sensor and video analytics controlled auto-switching day/night mode	Intelligent light sensor and video analytics controlled auto-switching day/night mode	Intelligent light sensor and video analytics controlled auto-switching day/night mode
Exposure control mode	Manual and software adjustable auto brightness control	Manual and software adjustable auto brightness control	Manual and software adjustable auto brightness control	Manual and software adjustable auto brightness control	Manual and software adjustable auto brightness control
Shutter type	Global shutter	Global shutter	Global shutter	Global shutter	Global shutter
Video output format	<b>JPEG, MJPEG stream, H.264</b>	<b>JPEG, MJPEG stream, H.264</b>	<b>JPEG, MJPEG stream, H.264</b>	<b>JPEG, MJPEG stream, H.264</b>	<b>JPEG, MJPEG stream, H.264</b>
JPEG quality	Adjustable 40 % – 90 %	Adjustable 40 % – 90 %	Adjustable 40 % – 90 %	Adjustable 40 % – 90 %	Adjustable 40 % – 90 %

## LENS

	Vidar HDx	Vidar HDx LT	Vidar Smart HDx	Vidar Smart 2xHDx LT	Vidar Smart 2xFHD Smart LT
Focal length	Variable: 4.8 – 84.6 mm	Variable: 4.8 – 84.6 mm	Variable: 4.8 – 84.6 mm	Camera 1 & 2: Variable: 4.8 – 84.6 mm	Camera 1 & 2: Variable: 15 – 50 mm
Zoom Ratio (optical)	17 ×	17 ×	17 ×	17 ×	3.3 ×
Fied of View (degrees)	Wide: 54° x 42°	Wide: 54° x 42°	Wide: 54° x 42°	Wide: 54° x 42°	
Horizontal x Vertical	Tele: 3,4° x 2,5°	Tele: 3,4° x 2,5°	Tele: 3,4° x 2,5°	Tele: 3,4° x 2,5°	Wide: 26° x 20°  Tele: 8° x 6°
Zoom & focus functions	Remote control, motorized, programmable presets	Remote control, motorized, programmable presets	Remote control, motorized, programmable presets	Remote control, motorized, programmable presets	Remote control, motorized, programmable presets
Iris functions	Automatic, Remote Control, Motorized	Automatic, Remote Control, Motorized	Automatic, Remote Control, Motorized	Automatic, Remote Control, Motorized	Automatic, Remote Control, Motorized
Built in optical filter	IR cut / all pass	IR cut / all pass	IR cut / all pass	IR cut / all pass	IR cut / all pass

## ILLUMINATION

	Vidar HDx	Vidar HDx LT	Vidar Smart HDx	Vidar Smart 2×HDx LT	Vidar Smart 2×FHD Smart LT
Number of SMD LEDs	12	12	12	12	12
Wavelength	760 850 nm (Infrared) + White	760 850 nm (Infrared) + White	760 850 nm (Infrared) + White	760 850 nm (Infrared) + White	760 850 nm (Infrared) + White
Illumination modes	Synchronized flash or continuous	Synchronized flash or continuous	Synchronized flash or continuous	Synchronized flash or continuous	Synchronized flash or continuous
Flash time	30 - 950 μs	30 - 950 μs	30 - 950 μs	30 - 950 μs	30 - 950 μs

## PROCESSING & I/O

Processing unit	ARM Dual Core processor with image processing chip	ARM Dual Core processor with image processing chip	ARM Dual Core processor with image processing chip	ARM Dual Core processor with image processing chip	ARM Dual Core processor with image processing chip
Operating memory	1 GB + 256 MB	1 GB + 256 MB	1 GB + 256 MB	1 GB + 256 MB	1 GB + 256 MB
Storage for image buffer reserved from the operating memory	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic
CPU for ANPR	-	-	ARM 4×1.4 GHz	ARM 4×1.4 GHz	ARM 4×1.4 GHz
Communication protocols	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP	ARP, ICMP, TCP/IP, DHCP, NTP, FTP, HTTP, SMTP, RTP
Interface	1 Gbit/sec Ethernet	1 Gbit/sec Ethernet	1 Gbit/sec Ethernet	1 Gbit/sec Ethernet	1 Gbit/sec Ethernet

## LASER

Wavelength	-	905 nm	-	905 nm	905 nm
Eye safety class	-	CLASS 1 60825-1 2014	-	CLASS 1 60825-1 2014	CLASS 1 60825-1 2014
Laser beam divergence	-	8 mRad	-	8 mRad	8 mRad

## ELECTRICAL DATA

Power requirement	24-28 V AC	24-28 V AC	24-28 V AC	24-28 V AC	24-28 V AC
Temperature regulation	Intelligent modular temperature control	Intelligent modular temperature control	Intelligent modular temperature control	Intelligent modular temperature control	Intelligent modular temperature control
Connectivity	Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (12 pin)	Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (12 pin)	Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (12 pin)	Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (12 pin)	Binder M12 circular: Ethernet (8 pin), Power (4 pin), User (12 pin)

## MECHANICAL DATA

Minimum operating temperature	- 45 °C / - 49 °F	- 45 °C / - 49 °F	- 45 °C / - 49 °F	- 45 °C / - 49 °F	-40 °C / -40 °F
Maximum operating temperature	55 °C / 131 °F	55 °C / 131 °F	55 °C / 131 °F	55 °C / 131 °F	55 °C / 131 °F

Maximum operating temperature (internal)	70 °C / 158 °F	70 °C / 158 °F	70 °C / 158 °F	70 °C / 158 °F	70 °C / 158 °F
Minimum startup temperature	-40 °C / -40 °F	-40 °C / -40 °F	-40 °C / -40 °F	-40 °C / -40 °F	-40 °C / -40 °F
IP & IK ratings	IP67 & IK10	IP67 & IK10	IP67 & IK10	IP67 & IK10	IP67 & IK10
Dimensions (length × width × height)	260x240x135	260x240x135	260x240x135	260x240x135	260x240x135
Weight (without bracket)	4.5 kg	4.5 kg	4.6 Kg	4.6 Kg	4.6 Kg
Weight (bracket)	0.6 kg / 1.32 lbs	0.6 kg / 1.32 lbs	0.6 kg / 1.32 lbs	0.6 kg / 1.32 lbs	0.6 kg / 1.32 lbs
Housing material	Vandal proof aluminium	Vandal proof aluminium	Vandal proof aluminium	Vandal proof aluminium	Vandal proof aluminium
Housing color	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)
Shield color	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)	RAL 9007 (grey aluminium)
In the box	Camera, Bracket	Camera, Bracket	Camera, Bracket	Camera, Bracket	Camera, Bracket

#### Adaptive Recognition

Adaptive Recognition America

Adaptive Recognition Hungary

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Overview Vidar

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