

														
	45.02 EUR 45.02 EUR	36.24 EUR 36.24 EUR	32.81 EUR 32.81 EUR	33.96 EUR 33.96 EUR	40.06 EUR 40.06 EUR	29.76 EUR 29.76 EUR	101.10 EUR 101.10 EUR	97.05 EUR 97.05 EUR	153.09 EUR 153.09 EUR	29.76 EUR 29.76 EUR	234.64 EUR 234.64 EUR	173.59 EUR 173.59 EUR	77.26 EUR 77.26 EUR	124.95 EUR 124.95 EUR
Standard	AHD, HD-CVI, HD-TVI, PAL	AHD	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, PAL	AHD / HD-CVI / HD-TVI / PAL	AHD, HD-CVI, HD-TVI	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, CVBS	AHD, HD-CVI, HD-TVI, PAL	AHD, HD-CVI, HD-TVI, CVBS
Sensor	1/3" Sony CMOS IMX222	1/2.9" Sony CMOS Progressive Scan CMOS	1/2.9" Sony CMOS IMX323	1/2.9" Sony CMOS IMX323	1/2.8" Sony CMOS - STARVIS Back-illuminated	1/2.7" Progressive Scan CMOS	1/2.8" SONY Starvis™ Back-illuminated CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" CMOS	1/2.8" CMOS	1/2.8" Progressive Scan CMOS	Progressive Scan CMOS	1/2.8" Progressive Scan CMOS
Digital Image Processor	HTC960E													
Matrix size		2.1 Mpx			2.1 Mpx	5 Mpx	8.3 Mpx	2.1 Mpx	2.1 Mpx	5 Mpx	5 Mpx	2.1 Mpx	2.1 Mpx	2.1 Mpx
IR illuminator power adjustment											Automatic			
IR illuminator														
PIR detector														
View angle	• 66° (manufacturer data) • 60° (our tests result)	• 91° (manufacturer data) • 93° (our tests result)	• 76° (manufacturer data) • 66° (our tests result)	• 76° (manufacturer data) • 66° (our tests result)	• 72° (manufacturer data) • 80° (our tests result)	• 95° (manufacturer data) • 75° (our tests result)		• 132° (manufacturer data) • 128° (our tests result)	132° - Camera for observing the interior of the vehicle / 109° - Front / rear view camera (manufacturer data) 127° - Camera for observing the interior of the vehicle / 104° - Front / rear view camera (our tests result)	• 80° (manufacturer data) • 70° (our tests result)	180°	• 90° (manufacturer data) • 84° (our tests result)	105°	103°
Range of IR illumination								3 m	3 m		10 m		10 m, 940 nm (invisible to the human eye)	
SN ratio						> 50 dB		> 65 dB	> 65 dB		> 65 dB		> 65 dB	
Vandal-proof														
"Index of Protection"						IP40						IP67		
Resolution	1280 x 720 - 720p AHD-M / HD-CVI / HD-TVI, 960 x 576 - 960H PAL	1920 x 1080 - 1080p AHD	1920 x 1080 - 1080p AHD / HD-CVI / HD-TVI, 960 x 576 - 960H PAL	1920 x 1080 - 1080p AHD / HD-CVI / HD-TVI, 960 x 576 - 960H PAL	• 1920 x 1080 - 1080p, AHD / HD-CVI / HD-TVI, • 1280 x 720 - 720p / AHD / HD-CVI / HD-TVI, • 960 x 576 - 960H, PAL	• 2592 x 1944 - 5 Mpx @ AHD / HD-TVI @ 20 fps / 12.5 fps ; • 2560 x 1440 - 4 Mpx @ AHD / HD-CVI / HD-TVI @ 25 fps ; • 1920 x 1080 - 1080p @ AHD / HD-CVI / HD-TVI @ 25 fps	3840 x 2160 - 8.3 Mpx, 4K UHD @ AHD / HD-CVI / HD-TVI @ 12.5 fps, 15 fps ; 2592 x 1944 - 5 Mpx @ AHD / HD-CVI / HD-TVI, 20 fps ; 2592 x 1944 - 5 Mpx @ AHD / HD-TVI @ 12.5 fps ; 2560 x 1440 - 4 Mpx @ AHD / HD-CVI / HD-TVI @ 30 fps ; 2560 x 1440 - 4 Mpx @ AHD @ 15 fps 1920 x 1080 - 1080p @ AHD / HD-TVI / HD-CVI, 30 fps / 25 fps ; 960 x 576 - 960H @ CVBS	1920 x 1080 - 1080p ; 1280 x 720 - 720p ; 960 x 576 - 960H PAL	1920 x 1080 - 1080p ; 1280 x 720 - 720p ; 960 x 576 - 960H PAL	• 2592 x 1944 - 5 Mpx @ AHD / HD-TVI @ 20 fps / 12.5 fps ; • 2560 x 1440 - 4 Mpx @ AHD / HD-CVI / HD-TVI @ 25 fps, 30 fps ; • 1920 x 1080 - 1080p @ AHD / HD-CVI / HD-TVI @ 25 fps, 30 fps	2592 x 1944 - 5 Mpx ; 2560 x 1440 - 3.7 Mpx	1920 x 1080 - 1080p ; 1280 x 720 - 720p ; 960 x 576 - 960H, PAL	1920 x 1080 - 1080p, AHD, HD-CVI, HD-TVI, 960 x 576 - 960H PAL	1920 x 1080 - 1080p ; 1280 x 720 - 720p ; 960 x 576 - 960H
Application	The camera is designed for indoor use, due to the possibility of steam condensation.	The camera is designed for indoor use, due to the possibility of steam condensation.	For indoor use	The camera is designed for indoor use, due to the possibility of steam condensation.	The camera is designed for indoor use, due to the possibility of steam condensation.	The camera is designed for indoor use, due to the possibility of steam condensation.		The camera is designed for installation inside vehicles	The camera is designed for installation inside vehicles	For indoor use			The camera is designed for indoor use, due to the possibility of steam condensation.	The camera is designed for indoor use, due to the possibility of steam condensation.
Video output	1 Vpp / 75 Ω - AHD-M, HD-CVI, HD-TVI, PAL	1 Vpp / 75 Ω - AHD	1 Vpp / 75 Ω - AHD, HD-CVI, HD-TVI, PAL	1 Vpp / 75 Ω - AHD, HD-CVI, HD-TVI, PAL	1 Vpp / 75 Ω - AHD / HD-CVI, HD-TVI / PAL	1 Vpp / 75 Ω, AHD, HD-CVI, HD-TVI, PAL - selectable by switch	1 Vpp / 75 Ω - M12, 4-pin socket, Code A	2 x 1 Vpp / 75 Ω - M12, 4-pin socket, Code A	1 Vpp / 75 Ω, AHD, HD-CVI, CVBS, 1 Vpp / 75 Ω	AHD / HD-CVI / HD-TVI / CVBS, 1 Vpp / 75 Ω	AHD / HD-CVI / HD-TVI / CVBS, 1 Vpp / 75 Ω	AHD / HD-CVI / HD-TVI / CVBS, 1 Vpp / 75 Ω	1 Vpp / 75 Ω, AHD, HD-CVI, HD-TVI, PAL	1 Vpp / 75 Ω, AHD / HD-CVI / HD-TVI / CVBS
Permissible relative humidity														≤ 95%
Lens	3.7 mm (pinhole)	2.8 mm	3.7 mm (pinhole)	3.7 mm (pinhole)	4 mm	3.6 mm		2.1 mm	2.1 mm - Camera for observing the interior of the vehicle, 2.8 mm - Front / rear view camera	3.7 mm	1.4 mm - Fish Eye, F2.0	3.6 mm	2.8 mm	2.8 mm (pinhole), F2.4
Auto Iris socket							DC							
Length of the cable								0.5 m	2 x 0.5 m					
Min. illumination	0.01 Lux				0.001 Lux		0.001 Lux @ F1.2		0.02 Lux F2.0 @ 30IRE					0.004 Lux (color), 0.0004 Lux (B&W)
IR illuminator support							ICR - Movable InfraRed filter				ICR - Movable InfraRed filter			
Audio			• Microphone built-in • Audio output - Cinch socket	• Microphone built-in • Audio output - Cinch socket			Microphone built-in	Microphone built-in		Microphone built-in		Microphone built-in • External microphone input - HD-CVI only		• Audio input - RCA (CINCH) • Audio output - BNC socket - HD-CVI only
Alarm inputs / outputs														
RS-485 interface														
OSD menu	✓		✓		✓	✓	✓	✓	✓	OSD - with the in-line remote control	OSD menu available via DAHUA recorder	OSD menu available via DAHUA recorder	OSD menu available via DAHUA recorder	OSD menu available via DAHUA recorder
Main features	• DNR - Digital Noise Reduction • BLC - Back Light Compensation • Auto White Balance • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• DNR - Digital Noise Reduction • BLC - Back Light Compensation • Auto White Balance • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• D-WDR - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • Sense-UP - (Slow Shutter) Increase the sensor sensitivity • BLC - Back Light Compensation • Auto White Balance • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• D-WDR - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • Sense-UP - (Slow Shutter) Increase the sensor sensitivity • BLC - Back Light Compensation • Auto White Balance • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• WDR - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • BLC - configurable Back Light Compensation • White Balance - ATW/Manual • AGC - Automatic Gain Control • Sharpness - sharper image outlines • Day/Night mode (color/b&w/auto)	• D-WDR - Wide Dynamic Range • DNR - Digital Noise Reduction • ICR - Movable InfraRed filter • AGC - Automatic Gain Control • BLC - Back Light Compensation • ATW/Manual • AGC - Automatic Gain Control • Sharpness - sharper image outlines • Day/Night mode (color/b&w/auto)	• WDR - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • ICR - Movable InfraRed filter • Auto White Balance • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• D-WDR - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • AGC - Automatic Gain Control • BLC/HLC - Back Light / High Light Compensation • Auto White Balance • Day/Night mode - Camera for observing the interior of the vehicle • Mirror - Mirror image • Privacy zones - max. 8 • Ergonomically designed High-impact ABS case for durability - EN50155	• AGC - Automatic Gain Control • BLC/HLC - Back Light / High Light Compensation • D-WDR - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • Auto White Balance • Day/Night mode - Camera for observing the interior of the vehicle • Mirror - Mirror image • Privacy zones - max. 8 • Ergonomically designed High-impact ABS case for durability - EN50155	• D-WDR - Wide Dynamic Range • DNR - Digital Noise Reduction • Mirror - Mirror image • Motion Detection • Sharpness - sharper image outlines • Auto White Balance	• 2D-DNR / 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • F-DNR (Defog) - Reduction of image noise caused by precipitation • BLC/HLC - Back Light / High Light Compensation (spot) • AGC - Automatic Gain Control • Auto White Balance	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • BLC/HLC - Back Light / High Light Compensation • Mirror - Mirror image • Privacy zones - max. 8 • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• D-WDR - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • BLC/HLC - Back Light / High Light Compensation • Mirror - Mirror image • Privacy zones - max. 8 • AGC - Automatic Gain Control • Sharpness - sharper image outlines	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR - Digital Noise Reduction • Day/Night mode • ICR - Movable InfraRed filter • D-ZOOM - Digital Zoom - 1x • AGC - Automatic Gain Control • BLC - Back Light Compensation • Mirror - Mirror image • Privacy zones • Length of the cable : 2.8 m
Power supply	12 V DC / 90 mA	12 V DC / 40 mA	12 V DC / 70 mA	12 V DC / 70 mA	12 V DC / 120 mA	12 V DC / 110 mA	12 V DC / 150 mA	12 V DC / 160 mA - Powering the cameras with 12V DC voltage directly from recorder	12 V DC / 160 mA - Powering the cameras with 12V DC voltage directly from recorder	12 V DC / 70 mA	12 V DC / 610 mA	12 V DC / 200 mA	12 V DC / 280 mA	12 V DC / 180 mA
Power consumption	≤ 1.1 W	≤ 0.5 W	≤ 0.9 W	≤ 0.9 W	≤ 0.9 W	≤ 1.8 W	max. 1.9 W	max. 1.9 W	max. 1.9 W	≤ 0.8 W	≤ 7.3 W	≤ 2.4 W	≤ 3.3 W	≤ 1.1 W
Housing	Mini, Metal	Mini, Plastic	Mini, Plastic	Mini, Plastic	Mini, Metal	Plastic	BOX, Metal	Plastic	Plastic	Spy - Plastic	Dome, Plastic	Compact, Aluminum	Spy, Plastic	Mini, Aluminum
Color	Black	Black	Black	Black	Black	White	White + Black	Black	Black	White	White	White	White	Black
Operation temp	-10 °C ... 50 °C	-10 °C ... 50 °C	-20 °C ... 50 °C	-20 °C ... 50 °C	-10 °C ... 50 °C	-10 °C ... 50 °C	-20 °C ... 50 °C	-40 °C ... 60 °C	-40 °C ... 60 °C	-10 °C ... 50 °C	-30 °C ... 60 °C	-40 °C ... 60 °C	-40 °C ... 60 °C	-30 °C ... 60 °C
Weight	0.06 kg	0.03 kg	0.06 kg	0.06 kg	0.03 kg	0.11 kg	0.54 kg	0.08 kg	0.16 kg	0.12 kg	0.26 kg	0.77 kg	0.12 kg	0.04 kg
Dimensions	27 x 24 x 20 mm	20 x 20 x 29 mm	66 x 11 x 12 mm	62 x 11 x 12 mm	30 x 30 x 29 mm (without bracket)	Ø 129 x 56 mm	149 x 82 x 58 mm	72 x 41 x 46 mm	116 x 100 x 50 mm	Ø 126 x 99 x 48 mm	244 x 90 x 90 mm	120 x 62 x 59 mm	44 x 36 x 30 mm	
Supported languages	English, Chinese, French, Spanish, Italian				Polish, English, French, Spanish, German, Portuguese, Russian, Italian	Polish, English, French, Spanish, Portuguese, Russian, Italian	English, Spanish, Portuguese	Polish, English, French, Spanish, German, Portuguese, Russian, Italian	Polish, English, French, Spanish, German, Portuguese, Russian, Italian	Polish, English, French, Spanish, German, Portuguese, Russian, Italian		Polish, English, French, Spanish, German, Portuguese, Russian, Italian	Polish, English	
Manufacturer / Brand	APTI	APTI	APTI	APTI	APTI	APTI	DAHUA	DAHUA	DAHUA	APTI	DAHUA	DAHUA	DAHUA	DAHUA
Guarantee	2 years	2 years	2 years	2 years	2 years	2 years	2 years	5 years	5 years	3 years	5 years	5 years	3 years	5 years

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