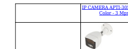
	IP CAMERA APTI-305C2L-28WP Full-Color - 3 Mpx 2.8 mm	IP CAMERA APTI-401C2L-28WP Full-Color - 4 Mpx 2.8 mm	IP CAMERA APTI-501C2L-28WP Full-Color - 5 Mpx 2.8 mm	IP CAMERA APTI-AI503C3-28W-L Full-Color - 5 Mpx 2.8 mm	IP CAMERA APTI-AI508C3-28W-L Full-Color - 5 Mpx 2.8 mm	IP CAMERA IPC2124LE-ADF28KMC-WL ColorHunter - 4 Mpx 2.8 mm UNIVIEW	IP CAMERA IPC2124LE-ADF28KMC-WL-BLACK ColorHunter - 4 Mpx 2.8 mm UNIVIEW	IP CAMERA IPC2124SB-ADF28KMC-I0 Tri-Guard - 4 Mpx 2.8 mm UNIVIEW	IP CAMERA IPC2125SB-ADF28KMC-I0 Tri-Guard - 5 Mpx 2.8 mm UNIVIEW
									
	47.88 EUR 47.88 EUR	70.09 EUR 70.09 EUR	93.84 EUR 93.84 EUR	87.71 EUR 87.71 EUR	64.73 EUR 64.73 EUR	169.97 EUR 169.97 EUR	213.57 EUR 213.57 EUR	271.60 EUR 271.60 EUR	317.34 EUR 317.34 EUR
Standard	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP
Matrix size	2.1 Mpx	4 Mpx	5 Mpx	5 Mpx	5 Mpx	4 Mpx	4 Mpx	4 Mpx	5 Mpx
Sensor	1/2.9 " Progressive Scan CMOS	1/3 " Progressive Scan CMOS	1/2.8 " SONY Starvis™ Back-illuminated CMOS	1/2.7 " Progressive Scan CMOS	1/2.8 " SONY Starvis™ Back-illuminated CMOS	1/3 " Progressive Scan CMOS	1/3 " Progressive Scan CMOS	1/2.7 " Progressive Scan CMOS	1/2.7 " Progressive Scan CMOS
Scanning system	...	...	...	...	...	...	...	...	...
Resolution	2304 x 1296 - 3 Mpx , 1920 x 1080 - 1080p , 1280 x 720 - 720p	2688 x 1512 - 4 Mpx , 2560 x 1440 - 3.7 Mpx , 1920 x 1080 - 1080p , 1280 x 720 - 720p	2592 x 1944 - 5 Mpx , 2560 x 1440 - 3.7 Mpx , 1920 x 1080 - 1080p , 1280 x 720 - 720p	2880 x 1620 - 5 Mpx , 2592 x 1536 - 4 Mpx , 2560 x 1440 - 3.7 Mpx , 1920 x 1080 - 1080p , 1280 x 720 - 720p	2880 x 1620 - 5 Mpx , 2592 x 1944 - 5 Mpx , 2560 x 1440 - 3.7 Mpx , 1920 x 1080 - 1080p , 1280 x 720 - 720p	2688 x 1520 - 4 Mpx , 2560 x 1440 - 3.7 Mpx , 2304 x 1296 - 3 Mpx , 1920 x 1080 - 1080p	2688 x 1520 - 4 Mpx , 2560 x 1440 - 3.7 Mpx , 2304 x 1296 - 3 Mpx , 1920 x 1080 - 1080p	2688 x 1520 - 4 Mpx , 2560 x 1440 - 3.7 Mpx , 2304 x 1296 - 3 Mpx , 1920 x 1080 - 1080p	2880 x 1620 - 5 Mpx , 2560 x 1440 - 3.7 Mpx , 2304 x 1296 - 3 Mpx , 1920 x 1080 - 1080p
Possibilities of adjustment	...	...	...	...	...	...	...	...	...
Lens	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm
Interface	...	...	...	...	...	...	...	...	...
View angle	• 91 ° (manufacturer data) • 99 ° (our tests result)	• 89 ° (manufacturer data) • 93 ° (our tests result)	93 °	• 95 ° (manufacturer data) • 110 ° (our tests result)	106 °	• 113 ° (manufacturer data) • 97 ° (our tests result)	• 113 ° (manufacturer data) • 97 ° (our tests result)	• 101 ° (manufacturer data) • 97 ° (our tests result)	• 113 ° (manufacturer data) • 105 ° (our tests result)
Range of IR illumination	...	...	...	...	...	30 m	30 m	30 m	30 m
White light LED illuminator range	30 m	30 m	30 m	25 m	25 m	30 m	30 m	30 m	30 m
Min. illumination	...	...	...	...	...	...	...	...	...
S/N ratio	...	...	...	...	...	> 52 dB	> 52 dB	> 56 dB	> 52 dB
Image compression method	H.265+ / H.265 / H.264+ / H.264 / MJPEG	H.265+ / H.265 / H.264+ / H.264 / MJPEG	H.265+ / H.265 / H.264+ / H.264 / MJPEG	H.265+ / H.265 / H.264+ / H.264 / MJPEG	H.265+ / H.265 / H.264+ / H.264 / MJPEG	Ultra 265 / H.265 / H.264 / MJPEG	Ultra 265 / H.265 / H.264 / MJPEG	Ultra 265 / H.265 / H.264 / MJPEG	Ultra 265 / H.265 / H.264 / MJPEG
Alarm inputs / outputs	—	—	—	—	—	—	—	—	—
Intelligent image analysis	...	...	...	...	...	...	...	...	...
RS-485 interface	—	—	—	—	—	—	—	...	...
Audio	—	—	• Microphone built-in, • Audio transmission via network	—	—	• Microphone built-in • Speaker built-in • Audio detection • Bi-directional audio streaming support	• Microphone built-in • Speaker built-in • Audio detection • Bi-directional audio streaming support	• Microphone built-in, • Speaker built-in • Audio detection • Bi-directional audio streaming support	• Microphone built-in • Speaker built-in • Audio detection • Bi-directional audio streaming support
Main stream frame rate	25 fps @ 1080p	25 fps @ 4 Mpx	25 fps @ 5 Mpx	25 fps @ 5 Mpx	25 fps @ 5 Mpx	25 fps @ 4 Mpx	25 fps @ 4 Mpx	25 fps @ 4 Mpx	25 fps @ 5 Mpx
Network interface	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)	10/100 Base-T (RJ-45)
Mechanical protection class	...	...	...	...	...	...	...	...	...
Network protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, SMTP, UDP	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, SMTP, UDP	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, SMTP, UDP, SNMP	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, UDP	...	IPv4/IPv6, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, IEEE 802.1x, SNMP, SSL / TLS	IPv4/IPv6, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, IEEE 802.1x, SNMP, SSL / TLS	...	IPv4/IPv6, IGMP, ICMP, ARP, TCP, UDP, DHCP PPPoE, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, IEEE 802.1x, SNMP, QoS, SSH
WEB Server	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in
Max. number of on-line users	10	10	10	10	10	32	32	32	32
ONVIF	✓	✓	19.12	2.4	✓	✓	✓	✓	✓
Memory card slot	—	—	—	—	—	Micro SD memory cards up to 128GB support (possible local recording)	Micro SD memory cards up to 128GB support (possible local recording)	Micro SD memory cards up to 256GB support (possible local recording)	Micro SD memory cards up to 256GB support (possible local recording)
Mobile phones support	Port no.: 80 or access by a cloud (P2P) • Android: Free application BitVision • iOS (iPhone): Free application BitVision	Port no.: 80 or access by a cloud (P2P) • Android: Free application BitVision • iOS (iPhone): Free application BitVision	Port no.: 80 or access by a cloud (P2P) • Android: Free application BitVision • iOS (iPhone): Free application BitVision	Port no.: 80 or access by a cloud (P2P) • Android: Free application BitVision • iOS (iPhone): Free application BitVision	Port no.: 80 or access by a cloud (P2P) • Android: Free application BitVision • iOS (iPhone): Free application BitVision	Access by a cloud (P2P) • Android: Free application EZView • iOS (iPhone): Free application EZView	Access by a cloud (P2P) • Android: Free application EZView • iOS (iPhone): Free application EZView	Access by a cloud (P2P) • Android: Free application EZView • iOS (iPhone): Free application EZView	Access by a cloud (P2P) • Android: Free application EZView • iOS (iPhone): Free application EZView
Default IP address	192.168.1.168	192.168.1.168	192.168.1.168	192.168.1.168	192.168.1.168	DHCP or 192.168.1.13	DHCP or 192.168.1.13	DHCP or 192.168.1.13	DHCP or 192.168.1.13
Default admin user / password	admin / admin The administrator password should be set at the first start	admin / admin The administrator password should be set at the first start	admin / admin The administrator password should be set at the first start	admin / admin The administrator password should be set at the first start	admin / admin The administrator password should be set at the first start	admin / 123456	admin / 123456	admin / 123456	admin / 123456
Web browser access ports	80	80	80	80	80	80, 554	80, 554	80, 554	80, 554
PC client access ports	80	80	80	80	80	Port no.: 80 or access by a cloud (P2P) - PC: Free application EZStation	Port no.: 80 or access by a cloud (P2P) - PC: Free application EZStation	Port no.: 80 or access by a cloud (P2P) - PC: Free application EZStation	Port no.: 80 or access by a cloud (P2P) - PC: Free application EZStation
Mobile client access ports	80	80	80	80	80	80	80	80	80
Port ONVIF	80	80	80	80	80	80	80	80	80
Estimated battery operation time	...	...	...	...	...	...	...	...	...
RTSP URL	rtsp://user:password@ip_address:80/0 - Main stream rtsp://user:password@ip_address:80/1 - Sub stream	rtsp://user:password@ip_address:80/0 - Main stream rtsp://user:password@ip_address:80/1 - Sub stream	rtsp://user:password@ip_address:80/0 - Main stream rtsp://user:password@ip_address:80/1 - Sub stream	rtsp://user:password@ip_address:80/0 - Main stream rtsp://user:password@ip_address:80/1 - Sub stream	rtsp://user:password@ip_address:80/0 - Main stream rtsp://user:password@ip_address:80/1 - Sub stream	rtsp://192.168.1.13:554/unicast/c1/s0/live - Main stream rtsp://192.168.1.13:554/unicast/c1/s1/live - Sub stream	rtsp://192.168.1.13:554/unicast/c1/s0/live - Main stream rtsp://192.168.1.13:554/unicast/c1/s1/live - Sub stream	rtsp://192.168.1.13:554/unicast/c1/s0/live - Main stream rtsp://192.168.1.13:554/unicast/c1/s1/live - Sub stream	rtsp://192.168.1.13:554/unicast/c1/s0/live - Main stream rtsp://192.168.1.13:554/unicast/c1/s1/live - Sub stream
Main features	• D-WDR - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • Flicker Control - The technology eliminates the tiring eyes flickering image effect • BLC - Back Light Compensation • HLC - High Light Compensation (spot) • Possibility to change the resolution, quality and bit rate • ICR - Movable InfraRed filter • Motion Detection • Privacy zones • Mirror - Mirror image • Sharpness - sharper image outlines • Intelligent image analysis : intrusion, motion detection based on human detection, video tampering	• Intelligent image analysis : intrusion, motion detection based on human detection, video tampering • D-WDR - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • ROI - improve the quality of selected parts of image • F-DNR (Defog) - Reduction of image noise caused by precipitation • Flicker Control - The technology eliminates the tiring eyes flickering image effect • BLC/HLC - Back Light / High Light Compensation • Motion Detection • Privacy zones • Possibility to change the resolution, quality and bit rate • Mirror - Mirror image • Sharpness - sharper image outlines	• Intelligent image analysis : intrusion, crossing the line (tripwire), motion detection based on human detection, face detection, detection of people gathering • WDR - 120 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • ROI - improve the quality of selected parts of image • F-DNR (Defog) - Reduction of image noise caused by precipitation • Flicker Control - The technology eliminates the tiring eyes flickering image effect • BLC/HLC - Back Light / High Light Compensation • Motion Detection • Privacy zones • Possibility to change the resolution, quality and bit rate • Mirror - Mirror image • Sharpness - sharper image outlines	• WDR - 120 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • Flicker Control - The technology eliminates the tiring eyes flickering image effect • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • BLC - Back Light Compensation • HLC - High Light Compensation (spot) • ROI - improve the quality of selected parts of image • Possibility to change the resolution, quality and bit rate • ICR - Movable InfraRed filter • Motion Detection • Privacy zones • Mirror - Mirror image • Sharpness - sharper image outlines • Intelligent image analysis : intrusion	• WDR - 120 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • Anti-Flicker - The technology eliminates the tiring eyes flickering image effect • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • BLC - Back Light Compensation • HLC - High Light Compensation (spot) • ROI - improve the quality of selected parts of image • Possibility to change the resolution, quality and bit rate • ICR - Movable InfraRed filter • Motion Detection • Privacy zones • Mirror - Mirror image • Sharpness - sharper image outlines • Intelligent image analysis : intrusion, crossing the line (tripwire) - classification of people and vehicles, detection of people gathering, loitering detection, motion detection based on human detection	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • ANR - Automatic Network Replenishment allows to save image to the card when the network connection with DVR is break (network failure) and next synchronize its • NAS - Network Attached Storage support • Corridor mode - useful for monitoring corridors, entrance gates and narrow rooms • BLC/HLC - Back Light / High Light Compensation • Possibility to change the resolution, quality and bit rate • Mirror - Mirror image • Privacy zones - max. 4 • Motion detection with human/vehicle silhouette recognition • Sharpness - sharper image outlines • Intelligent image analysis : intrusion, crossing the line (tripwire) (human silhouette)	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • ANR - Automatic Network Replenishment allows to save image to the card when the network connection with DVR is break (network failure) and next synchronize its • NAS - Network Attached Storage support • Corridor mode - useful for monitoring corridors, entrance gates and narrow rooms • BLC/HLC - Back Light / High Light Compensation • Possibility to change the resolution, quality and bit rate • Mirror - Mirror image • Privacy zones - max. 4 • Motion detection with human/vehicle silhouette recognition • Sharpness - sharper image outlines • Intelligent image analysis : intrusion, crossing the line (tripwire) (human silhouette)	• Active deterrence function - Intelligent alarm linked to turning on white light and loudspeaker • WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • ANR - Automatic Network Replenishment allows to save image to the card when the network connection with DVR is break (network failure) and next synchronize its • NAS - Network Attached Storage support • Corridor mode - useful for monitoring corridors, entrance gates and narrow rooms • BLC/HLC - Back Light / High Light Compensation • Possibility to change the resolution, quality and bit rate • Image rotation and mirror • Privacy zones - max. 4 • Motion detection with human/vehicle silhouette recognition • Sharpness - sharper image outlines • Overload protection : 4 kV • Intelligent image analysis : intrusion, crossing the line (tripwire), detection of entry into the area / exit from the area, face detection, people counting, crowd gathering estimation	• WDR - 120 dB - Wide Dynamic Range • 2D-DNR, 3D-DNR - Digital Noise Reduction • F-DNR (Defog) - Reduction of image noise caused by precipitation • ROI - improve the quality of selected parts of image • ANR - Automatic Network Replenishment allows to save image to the card when the network connection with DVR is break (network failure) and next synchronize its • NAS - Network Attached Storage support • Active deterrence function - Intelligent alarm linked to turning on white light and loudspeaker • Corridor mode - useful for monitoring corridors, entrance gates and narrow rooms • BLC/HLC - Back Light / High Light Compensation • Possibility to change the resolution, quality and bit rate • Image rotation and mirror • Privacy zones - max. 4 • Motion detection with human/vehicle silhouette recognition • Sharpness - sharper image outlines • Intelligent image analysis : intrusion, crossing the line (tripwire), detection of entry into the area / exit from the area, face detection, people counting, crowd gathering estimation
Power supply	• PoE (802.3af), • 12 V DC / 350 mA	• PoE (802.3af), • 12 V DC / 360 mA	• PoE (802.3af), • 12 V DC / 290 mA	• PoE (802.3af), • 12 V DC / 320 mA	• PoE (802.3af), • 12 V DC / 340 mA	• PoE (802.3af), • 12 V DC / 750 mA	• PoE (802.3af), • 12 V DC / 750 mA	• PoE (802.3af), • 12 V DC / 960 mA	• PoE (802.3af), • 12 V DC / 960 mA
Vandal-proof	...	...	...	...	...	—	—	—	—
Power consumption	≤ 4.2 W	≤ 4.3 W	≤ 3.5 W	≤ 3.9 W	≤ 4.1 W	≤ 9 W	≤ 9 W	≤ 11.5 W	≤ 11.5 W
Housing	Compact - Metal	Compact - Metal	Compact - Metal	Compact - Aluminum	Compact - Metal	Compact, Metal + Plastic	Compact, Metal + Plastic	Compact, Metal + Plastic	Compact, Metal + Plastic
Operation temp	-20 °C ... 60 °C	-20 °C ... 60 °C	-20 °C ... 60 °C	-20 °C ... 60 °C	-20 °C ... 60 °C	-30 °C ... 60 °C	-30 °C ... 60 °C	-30 °C ... 60 °C	-30 °C ... 60 °C
"Index of Protection"	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Color	White	White	White	White	White	White	Black	White	White
Operation temp	...	...	...	...	...	...	...	...	...
Weight	0.42 kg	0.42 kg	0.45 kg	0.42 kg	0.42 kg	0.41 kg	0.42 kg	0.42 kg	0.42 kg
Dimensions	171 x 73 x 73 mm	171 x 73 x 73 mm	171 x 73 x 73 mm	171 x 73 x 73 mm	172 x 73 x 73 mm	191 75 x 74 mm	191 75 x 74 mm	191 75 x 74 mm	191 75 x 74 mm
Supported languages	Polish, English, Bulgarian Czech, French, Spanish, Dutch, German, Portuguese, Russian, Turkish, Italian	Polish, English, Bulgarian Czech, French, Spanish, Dutch, German, Portuguese, Russian, Turkish, Italian	Polish, English, Bulgarian Czech, French, Spanish, Dutch, German, Portuguese, Russian, Turkish, Italian	Polish, English, Bulgarian Czech, French, Spanish, Dutch, German, Portuguese, Russian, Turkish, Italian	Polish, English, Bulgarian Czech, French, Spanish, Dutch, German, Portuguese, Russian, Turkish, Italian	Polish, English, Czech, Spanish, Dutch, French, German, Portuguese, Slovak, Hungarian, Italian	Polish, English, Czech, Spanish, Dutch, French, German, Portuguese, Slovak, Hungarian, Italian	Polish, English, Czech, Spanish, Dutch, French, German, Portuguese, Slovak, Hungarian, Italian	Polish, English, Czech, Spanish, Dutch, French, German, Portuguese, Slovak, Hungarian, Italian
Manufacturer / Brand	APTI	APTI	APTI	APTI	APTI	UNIVIEW	UNIVIEW	UNIVIEW	UNIVIEW
SAP Code	...	...	...	...	...	...	...	...	...
Guarantee	2 years	2 years	2 years	2 years	2 years	3 years	3 years	3 years	3 years