

	IPC CAMERA TC-CM06 SPTC-119V78WZ RMMAV4 • 5 Mpx 2.8 mm TIANSHI	IPC CAMERA TC-CM05 SPTC-119V78WZ RMMAV4 • 3 Mpx 2.8 mm TIANSHI	IPC CAMERA TC-CM03 SPTC-119V78WZ RMMAV4 • 8 Mpx 2.8 mm TIANSHI	IPC CAMERA TC-CM05 SPTC-119V78WZ RMMAV4 • 3 Mpx 2.8 mm TIANSHI	IPC CAMERA TC-CM03 SPTC-119V78WZ RMMAV4 • 8 Mpx 2.8 mm TIANSHI	IP ANDALOR PROOF CAMERA BCS-I-D0P4PC-ACT NonColor • 4 Mpx 3.6 mm DAHUA	IP ANDALOR PROOF CAMERA BCS-I-HD0P4B40SE SHAD000 Full Color • 4 Mpx 3.6 mm DAHUA	IPC CAMERA DS-7C02F4HD-102 BMMAI ACSENSE • 4 Mpx HIKVISION	
Standard	2530 EUR 2530 EUR	23730 EUR 2530 EUR	28518 EUR 29518 EUR	28518 EUR 29518 EUR	35443 EUR 3543 EUR	32777 EUR 32777 EUR	56600 EUR 56600 EUR	24275 EUR 24275 EUR	
Video resolution	IP	IP	P	P	P	TCP/IP 2 Mpx	TCP/IP 2 Mpx	TCP/IP 8 Mpx	
Sensor	1/2.8" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS	1/2.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS	1/1.8" Progressive Scan CMOS	
Resolution	2880 x 1440 - 5 Mpx, 2688 x 1520 - 4 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 720 - 720p	2880 x 1440 - 5 Mpx, 2688 x 1520 - 4 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 720 - 720p	3840 x 2160 - 8 Mpx, 4K UHD 3840 x 2160 - 8 Mpx, 3072 x 1536 - 6 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 720 - 720p	3840 x 2160 - 8 Mpx, 3072 x 1536 - 6 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 720 - 720p	3840 x 2160 - 8 Mpx, 3072 x 1536 - 6 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 960 - 1.3 Mpx, 1280 x 720 - 720p	3840 x 1230 - 4 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 960 - 1.3 Mpx, 1280 x 720 - 720p	3840 x 1230 - 4 Mpx, 2560 x 1440 - 3.7 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 960 - 1.3 Mpx, 1280 x 720 - 720p	2688 x 1520 - 4 Mpx, 2304 x 1296 - 3 Mpx, 1920 x 1080 - 1080p, 1280 x 720 - 720p	
Lens	2.8 mm	2.8 mm	2.8 mm	2.8 mm	2.8 mm	3.6 mm	3.6 mm	2.8 mm	
Range of IR illumination	10 m	10 m	15 m	15 m	30 m	-	-	-	
White light LED illuminator range	15 m	-	-	-	-	-	-	-	
View angle	104°	104°	105°	105°	105°	+ 93° (manufacturer data) + 90° (our tests result)	+ 93° (manufacturer data) + 90° (our tests result)	103°	
RS-485 interface	-	-	-	-	-	-	-	-	
Memory card slot	Micro SD card support up to 512GB	Micro SD card support up to 512GB	Micro SD card support up to 512GB	Micro SD card support up to 512GB	Micro SD memory cards up to 512GB 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)	Micro SD memory cards up to 512GB support (possible local recording)	
Image compression method	H.265 / H.265 + / H.264	H.265 / H.265 + / H.264	H.265 / H.265 + / H.264	H.265 / H.265 + / H.264	H.265 / H.265 + / H.264	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	
Alarm inputs / outputs	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
Audio	• Microphone built-in, • External microphone input • Audio output • Bi-directional audio streaming support • Audio detection • Compliance with the AAC standard	• Microphone built-in, • External microphone input • Audio output • Bi-directional audio streaming support • Audio detection • Compliance with the AAC standard	• Microphone built-in • Speaker built-in • Audio output • Bi-directional audio streaming support • Audio detection • Compliance with the AAC standard	• Microphone built-in • Speaker built-in • Audio output • Bi-directional audio streaming support • Audio detection • Compliance with the AAC standard	• Microphone built-in • Speaker built-in • Audio output • Bi-directional audio streaming support • Audio detection • Compliance with the AAC standard	• External microphone input • Audio output • Bi-directional audio streaming support • Audio detection	• External microphone input • Audio output • Bi-directional audio streaming support • Audio detection	• Microphone built-in	
Interface	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	10/100 Base-TX (RJ-45)	
Intrate	-	-	-	-	-	-	-	-	
Main stream frame rate	• 25 fps @ 5 Mpx • 50 fps @ 2 Mpx	• 25 fps @ 5 Mpx • 50 fps @ 2 Mpx	• 20 fps @ 8 Mpx • 25 fps @ 3.7 Mpx	• 20 fps @ 8 Mpx • 25 fps @ 3.7 Mpx	• 20 fps @ 8 Mpx • 25 fps @ 3.7 Mpx	25 fps @ 4 Mpx	12 ~ 8192 kbps - H.264 10 ~ 8192 kbps - H.265	25 fps @ 4 Mpx	
Network interface	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App
Access from PC	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App	Part no.: 3000 or access by a cloud (P2P) - PC Free application Easy7 Smart Client Client App
Intelligent image analysis	• classification of people and vehicles • crossing the line (tripwire) • video tampering • face detection • face detection	• classification of people and vehicles • crossing the line (tripwire) • video tampering • intrusion • video tampering	• classification of people and vehicles • video tampering • crossing the line (tripwire) • intrusion	• classification of people and vehicles • video tampering • crossing the line (tripwire) • intrusion	• classification of people and vehicles • video tampering • crossing the line (tripwire) • intrusion	• classification of people and vehicles • video tampering • detection of persons on duty • protective helmet detection • detection of people gathering • people counting • single parking • detection of loitering in a given area • lost map • abandoned/missing object • double crossing the line • crossing the line (tripwire)	• classification of people and vehicles • video tampering • detection of persons on duty • protective helmet detection • detection of people gathering • people counting • single parking • detection of loitering in a given area • lost map • abandoned/missing object • double crossing the line • crossing the line (tripwire)	• Camera from ACSENSE series • WDR - 120 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • BLC/CHLC - Back Light / High Light Compensation • Auto Framer - The technology eliminates the tiring eyes • ANR - Automatic Network Replacement allows to save image in the card when the network connection with DVR is connect network failure) and test synchronous its • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	
Network protocols	-	-	-	-	-	-	-	-	
WEB Server	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	Built-in	
Max. number of online users	2	2	2	2	2	20	20	20	
ONVIF	✓	✓	✓	✓	✓	20.08	18.06	✓	
Protocols	-	-	-	-	-	• Overvoltage protection : 14 V • Protection against lightning discharges - 6 kV	-	-	
Mechanical protection class	-	-	-	-	-	-	-	-	
Main features	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 120 dB - 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 • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image to the card when the network connection with DVR is a break network (failure) and test synchronous its • Corridor mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• WDR - 140 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • BLC/CHLC - Back Light / High Light Compensation • Possibility to change the resolution, quality and bit rate • Motion Detection • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • ANR - Automatic Network Replacement allows to save image in the card when the network connection with DVR is connect network failure) and test synchronous its • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • Daynight mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice	• Camera from ACSENSE series • WDR - 120 dB - Wide Dynamic Range • 3D-DNR - Digital Noise Reduction • BLC/CHLC - Back Light / High Light Compensation • Auto Framer - The technology eliminates the tiring eyes • ANR - Automatic Network Replacement allows to save image in the card when the network connection with DVR is connect network failure) and test synchronous its • NAS - Network Attached Storage support - allows to connect memory resources directly to the computer network • Daynight mode • AAC - Automatic Gain Control • BLC/HLHC - Back Light / High Light Compensation • ICR - Movable Infrared filter • Daynight mode • Possibility to change the resolution, quality and bit rate • Early Warning (EW) - combination of white light warning with audio voice • Intelligent image analysis : intrusion, crossing the line (tripwire), face detection	
Mobile phones support	Part no.: 3000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3777 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 3777 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 8000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client	Part no.: 8000 or access by a cloud (P2P) • Android: Free application Easy7 Smart Client • iOS (iPhone): Free application Easy7 Smart Client
Default admin user / password	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start	admin / The administrator password should be set at the first start
Default IP address	192.168.1.2 80, 443, 3000, 3001, 3002, 23002	192.168.1.2 80, 443, 3000, 3001, 3002, 23002	192.168.1.2 80, 443, 3000, 3001, 3002, 23002	192.168.1.2 80, 443, 3000, 3001, 3002, 23002	192.168.1.2 80, 443, 3000, 3001, 3002, 23002	192.168.1.108 80, 3777	192.168.1.108 80, 3777	192.168.1.64 80	192.168.1.64 80
Web browser access ports	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3777	3777	80	80
PC client access ports	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3777	3777	80	80
Mobile client access ports	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3000, 3001	3777	3777	80	80
Port ONVIF	80	80	80	80	80	80	80	80	80
RTSP URL	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0	rtsp://admin:hash@192.168.1.108:554/cam/realmonitor?channel=1&subtype=0
SAP Code	-	-	-	-	-	-	-	-	-
Power supply	• PoE (802.3af) • 12 V DC / 670 mA	• PoE (802.3af) • 12 V DC / 670 mA	• PoE (802.3af) • 12 V DC / 580 mA	• PoE (802.3af) • 12 V DC / 580 mA	• PoE (802.3af) • 12 V DC / 670 mA	• PoE (802.3af) • ePoE • 12 V DC / 370 mA	• PoE (802.3af) • ePoE • 12 V DC / 370 mA	• PoE (802.3af) • ePoE • 12 V DC / 370 mA	• PoE (802.3af) • ePoE • 12 V DC / 370 mA
Power consumption	≤ 8 W	≤ 8 W	≤ 8.5 W	≤ 8.5 W	≤ 8.5 W	≤ 4.4 W	≤ 4.4 W	≤ 4.2 W @ PoE (802.3af) ≤ 3.2 W @ 12 V DC	≤ 4.2 W @ PoE (802.3af) ≤ 3.2 W @ 12 V DC
Housing	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal	Dome - Metal
Color	White	White	White	White	White	White	White	White	White
"Index of Protection"	IP66	IP67	IP66	IP66	IP66	IP67	IP67	IP67	IP67
Vandal-proof	-	-	-	-	-	-	-	-	-
Operation temp.	40 °C ~ - 60 °C -55 °C ~ 60 °C	40 °C ~ - 60 °C -55 °C ~ 60 °C	40 °C ~ - 65 °C -55 °C ~ 60 °C	40 °C ~ - 65 °C -55 °C ~ 60 °C	40 °C ~ - 65 °C -55 °C ~ 60 °C	40 °C ~ - 60 °C -55 °C ~ 60 °C	40 °C ~ - 60 °C -55 °C ~ 60 °C	40 °C ~ - 60 °C -55 °C ~ 60 °C	40 °C ~ - 60 °C -55 °C ~ 60 °C
Dimensions	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm	80 mm x 80 mm x 96 mm

Supported languages	Polish, English, Albanian, Arabic, Hebrew, Spanish, Dutch, Korean, French, German, Portuguese, Russian, Thai, Turkish, Vietnamese, Ukrainian, Vietnamese, Italian	Polish, English, Albanian, Spanish, Korean, Italian, Turkish, Russian, Thai, French, Dutch, Hebrew, Arabic, German, Portuguese, Russian, Thai, Turkish, Vietnamese, German, Ukrainian, Portuguese	Polish, English, Albanian, Arabic, Spanish, French, Dutch, Korean, French, German, Portuguese, Russian, Thai, Turkish, Vietnamese, Italian	Polish, English, Albanian, Arabic, Hebrew, Spanish, Dutch, Korean, French, German, Portuguese, Russian, Thai, Turkish, Vietnamese, Italian	Polish, English, Albanian, Arabic, French, Hebrew, Spanish, Dutch, Korean, German, Portuguese, Russian, Italian	Polish, English, Czech, French, Spanish, Dutch, German, Portuguese, Russian, Italian	Polish, English, Czech, French, Spanish, Dutch, German, Portuguese, Russian, Italian	Polish, English, Bulgarian, Croatian, Czech, Danish, Estonian, Finnish, French, Greek, Spanish, Dutch, Lithuanian, Latvian, German, Norwegian, Portuguese, Russian, Romanian, Serbian, Slovak, Slovenian, Swedish, Turkish, Ukrainian, Hungarian, Italian
	TIANDY	TIANDY	TIANDY	TIANDY	TIANDY	BICS	DASHUA	SHKVISION
Manufacturer / Brand	TIANDY	TIANDY	TIANDY	TIANDY	TIANDY	BICS	DASHUA	SHKVISION
Warranty	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years