



Fixed Indoor Dome with WDR

Indoor Fisheye Dome with WDR

Vari-Focal Indoor Dome



| | B51 | B52 | B53 | B55 | B56 | D61 | D62 | D64 | D65 |
|-----------------------------------|--|---|--|--|--|--|--|--|--|
| Model | B51 | B52 | B53 | B55 | B56 | D61 | D62 | D64 | D65 |
| Product Type | Dome | Dome | Dome | Fisheye Dome | Fisheye Dome | Dome | Dome | Dome | Dome |
| Maximum Resolution | 5MP | 10MP | 3MP | 10MP | 3MP | 1.3MP | 2MP | 1MP | 3MP |
| Application Environment | Indoor | Indoor | Indoor | Indoor | Indoor | Indoor | Indoor | Indoor | Indoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes |
| Superior Low Light Sensitivity | No | No | No | No | No | Yes | Yes | No | No |
| Minimum Illumination | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.8 | Color: 0.1 lux, B/W: 0.05 lux at F2.0 | Color: 0.1 lux, B/W: 0.05 lux at F2.0 | Color: 0.1 lux at F1.4 | Color: 0.1 lux at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes |
| IR LED | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | No | No | No | No | Yes | Yes |
| Lens | Fixed focal, f1.9mm / F2.8, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f1.9mm / F2.8, Fixed iris, Fixed focus | Fixed focal, f1.37mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f1.19mm / F2.0, Fixed iris, Fixed focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus |
| Viewing Angle Adjustment | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | | | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° |
| Lens Mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 129.56° (overview area), 79.0° (high detail area) | 102° | 129.56° (overview area), 79.0° (high detail area) | 180° (overview area), 109.8° (high detail area) | 180° (overview area), 109.8° (high detail area) | 83.0°-31.1° | 92.5°-35.9° | 59.8°-24.7° | 70.5°-28.2° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG |
| Maximum Frame Rate vs. Resolution | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 6 fps at 3648 x 2736 6 fps at 3648 x 2160 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 6 fps at 3648 x 2736 6 fps at 2592 x 1944 6 fps at 2048 x 1536 6 fps at 640 x 480 | 15 fps at 2048 x 1536 15 fps at 640 x 480 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 |
| View Mode | | | | Fisheye View | Fisheye View | | | | |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | Basic WDR (69 dB) | Basic WDR (65.2 dB) | Superior WDR (107 dB) | Basic WDR (65.2 dB) | Superior WDR (107 dB) | No | No | No | No |
| Digital Noise Reduction | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR |
| Audio | 2-way | 2-way | 2-way | 2-way | 2-way | No | No | No | No |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | No | No | No | No |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) |
| Power Source | DC 12V; PoE Class 2 | DC 12V; PoE Class 2 | DC 12V; PoE Class 2 | DC 12V; PoE Class 2 | DC 12V; PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 |
| Environmental Casing | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Vandal Resistant (IK09) | No | No | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Vandal Resistant (IK09) |
| Bundled Accessories | No | No | No | No | No | No | No | No | No |
| Mount Type | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Starting Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) |
| Operating Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) |
| Approvals | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC | CE, FCC | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IK09 |















Fixed Outdoor Dome

Fixed Outdoor Dome with WDR



| | D71 | D72 | KCM-7111 | E71 | E72 | E73 | E74 | E75 | E76 | E77 |
|-----------------------------------|--|--|--|--|--|--|--|--|--|---|
| Model | D71 | D72 | KCM-7111 | E71 | E72 | E73 | E74 | E75 | E76 | E77 |
| Product Type | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome |
| Maximum Resolution | 1MP | 3MP | 4MP | 1MP | 3MP | 3MP | 3MP | 1.3MP | 2MP | 10MP |
| Application Environment | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Superior Low Light Sensitivity | No | No | Yes | No | No | No | No | Yes | Yes | No |
| Minimum Illumination | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0.05 lux at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.85 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.85 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR LED | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR Working Distance | | | | | | | | 15m | 15m | 15m |
| Lens | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f2.8mm / F2.0, Fixed iris, Manual focus | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus |
| Viewing Angle Adjustment | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° |
| Lens Mount | Board mount | Board mount | CS mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 72.0° | 83.3° | 82.6° | 72.0° | 83.3° | 82.3° | 85.7° | 77.9° | 87.5° | 101.4° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 | 30 fps at 1920 x 1080 60 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 | 6 fps at 3648 x 2736 6 fps at 3648 x 2160 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | No | No | No | Basic WDR (69 dB) | Basic WDR (69 dB) | Basic WDR (69 dB) | Superior WDR (107 dB) | Basic WDR (83.5 dB) | Basic WDR (72 dB) | Basic WDR (65.2 dB) |
| Digital Noise Reduction | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR |
| Audio | No | No | 2-way | No | No | No | No | 2-way | 2-way | 2-way |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | No | No | 2/2 | No | No | No | No | 1/1 | 1/1 | 1/1 |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) |
| Power Source | PoE Class 2 | PoE Class 2 | DC 12V; PoE Class 3 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 |
| Environmental Casing | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) |
| Bundled Accessories | No | No | No | No | No | No | No | No | No | No |
| Mount Type | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Starting Temperature | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) |
| Operating Temperature | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) |
| Approvals | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X |

|  | Vari-Focal Outdoor Dome with WDR | | | | | | Vari-Focal Outdoor Dome with WDR | | | | |
|--|--|--|--|--|--|--|--|--|--|--|---|
| |  |  |  |  |  |  |  |  |  |  |  |
| Model | D81 | D82 | ACM-7411 | E81 | E82 | E83 | E84 | E85 | E86 | E88 | E89 |
| Product Type | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome | Dome |
| Maximum Resolution | 1MP | 3MP | 1.3MP | 1MP | 3MP | 5MP | 2MP | 1MP | 3MP | 1.3MP | 10MP |
| Application Environment | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Superior Low Light Sensitivity | No | No | No | No | No | No | Yes | No | No | Yes | No |
| Minimum Illumination | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.5 lux, B/W: 0.05 lux at F1.0 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR LED | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes (Adaptive) |
| IR Working Distance | | | | | | | | | | | 15m |
| Lens | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f3.3-12mm / F1.6, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus | Vari-focal, f3.1-13.3mm / F1.4, Fixed iris, Manual focus |
| Viewing Angle Adjustment | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° |
| Lens Mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 59.8°-24.7° | 70.5°-28.2° | 83.0°-23.8° | 59.8°-24.7° | 70.5°-28.2° | 69.2°-28.2° | 92.5°-35.9° | 60.1°-24.3° | 70.5°-28.8° | 83.0°-31.1° | 100.5°-25.8° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | MPEG-4 SP, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 8 fps at 1280 x 1024 10 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 | 6 fps at 3648 x 2736 6 fps at 3648 x 2160 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 |
| Multi-Streaming | Dual streams | Dual streams | Single streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | No | No | No | Basic WDR (69 dB) | Basic WDR (69 dB) | Basic WDR (69 dB) | Basic WDR (72 dB) | Superior WDR (107 dB) | Superior WDR (107 dB) | Basic WDR (83.5 dB) | Basic WDR (65.2 dB) |
| Digital Noise Reduction | DNR | DNR | No | DNR | DNR | DNR | DNR | DNR | DNR | DNR | DNR |
| Audio | No | No | 2-way | No | No | No | No | No | No | No | 2-way |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | No | No | 1/1 | No | No | No | No | No | No | No | 1/1 |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | No | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) |
| Power Source | PoE Class 2 | PoE Class 2 | DC 12V; PoE Class 3 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 |
| Environmental Casing | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) |
| Bundled Accessories | No | No | No | No | No | No | No | No | No | No | No |
| Mount Type | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Vista, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime |
| ONVIF Compliant | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Heater | | | Yes | | | | | | | | |
| Fan | | | Yes | | | | | | | | |
| Starting Temperature | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) |
| Operating Temperature | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) |
| Approvals | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10 | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X |








Indoor Zoom Dome with WDR

Outdoor Zoom Dome with WDR

Hemispheric Dome with WDR



| | Indoor Zoom Dome with WDR | | | | | Outdoor Zoom Dome with WDR | | | | | Hemispheric Dome with WDR | |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Model | B61 | B64 | B65 | B67 | KCM-3311 | B81 | B84 | B85 | B87 | KCM-7311 | KCM-3911 | KCM-7911 |
| Product Type | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Zoom Dome | Hemispheric Dome | Hemispheric Dome |
| Maximum Resolution | 5MP | 1.3MP | 2MP | 3MP | 4MP | 5MP | 1.3MP | 2MP | 3MP | 4MP | 4MP | 4MP |
| Application Environment | Indoor | Indoor | Indoor | Indoor | Indoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Indoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Superior Low Light Sensitivity | No | Yes | Yes | No | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| Minimum Illumination | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0.05 lux at F1.4 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2 | Color: 0.1 lux, B/W: 0.05 lux at F1.4 | Color: 1.63 lux, B/W: 0.06 lux at F2.8 | Color: 1.63 lux, B/W: 0.06 lux at F2.8 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR LED | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | No | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | Yes (Adaptive) | No | No |
| IR Working Distance | 20m | 20m | 20m | 20m | 20m | 20m | 20m | 20m | 20m | 20m | 20m | 20m |
| Lens | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3.3-12mm / F1.4-2.9, P-Iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3-9mm / F1.2-2.1, DC iris, Auto focus | Zoom, f3.3-12mm / F1.4-2.9, P-Iris, Auto focus | Fisheye, 1.05mm / F2.8, Fixed iris, Fixed focus |
| Zoom Ratio | 3x optical | 3x optical | 3x optical | 3x optical | 3.6x optical | 3x optical | 3x optical | 3x optical | 3x optical | 3x optical | 3.6x optical | |
| Viewing Angle Adjustment | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-180°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350° | Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350° | |
| Lens Mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 85.7°-30.5° | 90.6°-31.8° | 103.6°-36.2° | 84.5°-29.8° | 77.2°-22.6° | 85.7°-30.5° | 90.6°-31.8° | 103.6°-36.2° | 84.5°-29.8° | 77.2°-22.6° | 180° | 180° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG |
| Maximum Frame Rate vs. Resolution | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 6 fps at 2032 x 1920 12 fps at 1920 x 1080 12 fps at 1280 x 720 12 fps at 640 x 480 | 6 fps at 2032 x 1920 12 fps at 1920 x 1080 12 fps at 1280 x 720 12 fps at 640 x 480 |
| View Mode | | | | | | | | | | | Fisheye View, Dwarped View: 180° / 360° Panorama, ePTZ, 6 VGA, Motion Detection Preset | Fisheye View; Dwarped View: 180° / 360° Panorama, ePTZ, 6 VGA, Motion Detection Preset |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | Basic WDR (69 dB) | Basic WDR (83.5 dB) | Basic WDR (72 dB) | Superior WDR (107 dB) | Advanced WDR (80 dB) | Basic WDR (69 dB) | Basic WDR (83.5 dB) | Basic WDR (72 dB) | Superior WDR (107 dB) | Advanced WDR (80 dB) | Advanced WDR (80 dB) | Advanced WDR (80 dB) |
| Digital Noise Reduction | DNR | DNR | DNR | DNR | 2D+3D DNR | DNR | DNR | DNR | DNR | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR |
| Audio | 2-way | 2-way | 2-way | 2-way | No | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | 2/2 | 2/2 | 2/2 | 2/2 | No | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 | 2/2 |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | No | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) |
| Power Source | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 |
| Environmental Casing | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Vandal Resistant (IK09) | No | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66) |
| Bundled Accessories | No | No | No | No | No | No | No | No | No | No | No | No |
| Mount Type | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Ceiling |
| Other Value-Added Features | | | | | Defogging | | | | | Defogging | Defogging | Defogging |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 | IE 8, IE 9 | IE 8, IE 9 |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Heater | | | | | | | | | | | | |
| Fan | | | | | | | | | | | | |
| Starting Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -10°C ~ 50°C (14°F ~ 122°F) within 30 minutes | -10°C ~ 50°C (14°F ~ 122°F) | -20°C ~ 50°C (-22°F ~ 122°F) |
| Operating Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-22°F ~ 122°F) |
| Approvals | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66, IK10, NEMA 4X | CE, FCC, IP66 | CE, FCC | CE, FCC, IP66 |

|  | Fixed Bullet | | | Fixed Bullet with WDR | | | |
|---|--|--|--|--|--|--|---|
| |  |  |  |  |  |  |  |
| Model | D31 | D32 | E31 | E32 | E33 | E34 | E37 |
| Product Type | Bullet | Bullet | Bullet | Bullet | Bullet | Bullet | Bullet |
| Maximum Resolution | 1MP | 3MP | 1MP | 3MP | 5MP | 3MP | 10MP |
| Application Environment | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Superior Low Light Sensitivity | No | No | No | No | No | No | No |
| Minimum Illumination | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.85 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR LED | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| IR Working Distance | | | | | | | |
| Lens | Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus |
| Lens Mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 55.9° | 62.7° | 55.9° | 62.7° | 62.7° | 68.0° | 100.8° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 6 fps at 3648 x 2736 6 fps at 3648 x 2160 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240 |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | No | No | Basic WDR (69 dB) | Basic WDR (69 dB) | Basic WDR (69 dB) | Superior WDR (107 dB) | Basic WDR (65.2 dB) |
| Digital Noise Reduction | DNR | DNR | DNR | DNR | DNR | DNR | DNR |
| Audio | No | No | No | No | No | No | No |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | No | No | No | No | No | No | No |
| Local Storage | No | No | No | No | No | No | MicroSDHC/MicroSDXC memory card slot (card not included) |
| Power Source | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 3 |
| Environmental Casing | Weatherproof (IP66) | Weatherproof (IP66) | Weatherproof (IP66); Vandal proof metal casing (IK10) | Weatherproof (IP66); Vandal proof metal casing (IK10) | Weatherproof (IP66); Vandal proof metal casing (IK10) | Weatherproof (IP66); Vandal proof metal casing (IK10) | Weatherproof (IP66); Vandal proof metal casing (IK10) |
| Bundled Accessories | Bracket | Bracket | Bracket | Bracket | Bracket | Bracket | Bracket |
| Mount Type | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole | Wall, Ceiling, Corner, Pole |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Heater | | | | | | | |
| Fan | | | | | | | |
| Starting Temperature | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) |
| Operating Temperature | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) |
| Approvals | CE, FCC, IP66 | CE, FCC, IP66 | CE, FCC, IP66, IK10 (metal casing) | CE, FCC, IP66, IK10 (metal casing) | CE, FCC, IP66, IK10 (metal casing) | CE, FCC, IP66, IK10 (metal casing) | CE, FCC, IP66, NEMA 4X, IK10 (metal casing) |



Box with Zoom Lens



| | KCM-5211 | KCM-5211E | KCM-5511 | KCM-5611 |
|-----------------------------------|---|---|---|---|
| Model | KCM-5211 | KCM-5211E | KCM-5511 | KCM-5611 |
| Product Type | Zoom Box | Zoom Box | Zoom Box | Zoom Box |
| Maximum Resolution | 4MP | 4MP | 2MP | 2MP |
| Application Environment | Indoor | Outdoor | Outdoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | Yes | Yes | Yes | Yes |
| Superior Low Light Sensitivity | Yes | Yes | Yes | Yes |
| Minimum Illumination | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6 | Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6 |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes |
| IR LED | No | Yes | Yes | Yes |
| Lens | Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus | Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus | Zoom, f3.2-70.4mm / F1.6-3.8, DC iris, Auto focus | Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus |
| Zoom Ratio | 18x optical | 18x optical | 22x optical | 18x optical |
| Lens Mount | Board mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 48.9°-3.6° | 48.9°-3.6° | 57.1°-3.0° | 48.9°-3.6° |
| Compression | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG |
| Maximum Frame Rate vs. Resolution | 8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | No | Advanced WDR (80 dB) | Advanced WDR (80 dB) | Advanced WDR |
| Digital Noise Reduction | DNR | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR |
| Audio | 2-way | 2-way | 2-way | 2-way |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | 2/2 | 2/2 | 2/2 | 2/2 |
| Serial Port | | RS-485, RS-422 | RS-485, RS-422 | RS-485, RS-422 |
| Local Storage | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) |
| Power Source | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 |
| Environmental Casing | No | Weatherproof (IP66) | Weatherproof (IP66) | Weatherproof (IP66) |
| Bundled Accessories | No | No | No | No |
| Mount Type | Wall, Corner, Pole | Wall, Corner, Pole | Wall, Corner, Pole | Wall, Corner, Pole |
| Other Value-Added Features | | Defogging | Defogging | Defogging |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9 | IE 8, IE 9 | IE 8, IE 9 | IE 8, IE 9 |
| ONVIF Compliant | Yes | Yes | Yes | Yes |
| Starting Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes | -10°C ~ 50°C (14°F ~ 122°F) within 30 minutes | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes |
| Operating Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -30°C ~ 50°C (-22°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) |
| Approvals | CE, FCC | CE, FCC, IP66 | CE, FCC, IP66 | CE, FCC, IP66 |














Cube

Cube with WDR



| | Cube | | Cube with WDR | | |
|-----------------------------------|--|--|--|--|--|
| | | | | | |
| Model | D11 | D12 | E11 | E12 | E13 |
| Product Type | Cube | Cube | Cube | Cube | Cube |
| Maximum Resolution | 1MP | 3MP | 1MP | 3MP | 5MP |
| Application Environment | Indoor | Indoor | Indoor | Indoor | Indoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS |
| Day / Night | No | No | No | No | No |
| Superior Low Light Sensitivity | No | No | No | No | No |
| Minimum Illumination | Color: 0.1 lux at F2.0 | Color: 0.1 lux at F2.0 | Color: 0.1 lux at F1.8 | Color: 0.1 lux at F2.0 | Color: 0.1 lux at F2.0 |
| Mechanical IR Cut Filter | No | No | No | No | No |
| IR LED | No | No | No | No | No |
| Lens | Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus | Fixed focal, f4.2mm / F1.8, Fixed iris, Manual focus | Fixed focal, f2.8mm / F2.0, Fixed iris, Manual focus | Fixed focal, f2.8mm / F2.0, Fixed iris, Manual focus |
| Lens Mount | Board mount | Board mount | CS mount (interchangeable lens) | CS mount (interchangeable lens) | CS mount (interchangeable lens) |
| Horizontal Viewing Angle | 60.2° | 70.8° | 53.8° | 92.6° | 92.6° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | No | No | Basic WDR (69 dB) | Basic WDR (69 dB) | Basic WDR (69 dB) |
| Digital Noise Reduction | DNR | DNR | DNR | DNR | DNR |
| Audio | No | No | 2-way, built-in microphone | 2-way, built-in microphone | 2-way, built-in microphone |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | No | No | No | No | No |
| Local Storage | No | No | No | No | No |
| Power Source | PoE Class 1 | PoE Class 2 | PoE Class 2 | PoE Class 2 | PoE Class 2 |
| Environmental Casing | No | No | No | No | No |
| Bundled Accessories | Bracket | Bracket | Bracket | Bracket | Bracket |
| Mount Type | Wall, Ceiling | Wall, Ceiling | Wall, Ceiling | Wall, Ceiling | Wall, Ceiling |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes |
| Starting Temperature | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) |
| Operating Temperature | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) | -10°C ~ 45°C (14°F ~ 113°F) |
| Approvals | CE, FCC | CE, FCC | CE, FCC | CE, FCC | CE, FCC |

|  | PTZ | | | | | | Mini PTZ | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|
| |  |  |  |  |  |  |  |  |  |  | |
| Model | I91 | I92 | I93 | I94 | KCM-8111 | KCM-8211 | B94 | B95 | B96 | B97 | |
| Product Type | PTZ | PTZ | PTZ | PTZ | PTZ | PTZ | Mini PTZ | Mini PTZ | Mini PTZ | Mini PTZ | |
| Maximum Resolution | 1MP | 2MP | 1MP | 2MP | 2MP | 2MP | 1.3MP | 2MP | 5MP | 3MP | |
| Application Environment | Indoor | Indoor | Outdoor | Outdoor | Indoor | Outdoor | Outdoor | Outdoor | Outdoor | Outdoor | |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | Progressive Scan CMOS | |
| Day / Night | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Superior Low Light Sensitivity | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | |
| Minimum Illumination | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.8 | Color: 0.1 lux, B/W: 0.05 lux at F1.8 | Color: 0.1 lux, B/W: 0.05 lux at F1.8 | Color: 0.1 lux, B/W: 0.05 lux at F1.8 | |
| Mechanical IR Cut Filter | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| IR LED | No | No | No | No | No | No | No | No | No | No | |
| Lens | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus | Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus | Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus | Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus | Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus | Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus | |
| Zoom Ratio | 30x optical, 16x digital | 30x optical, 16x digital | 30x optical, 16x digital | 30x optical, 16x digital | 18x optical, 16x digital | 18x optical, 16x digital | 10x optical | 10x optical | 10x optical | 10x optical | |
| Panning and Tilting Range | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180° | Pan: 0°-350°, Tilt: 0°-180° | Pan: 0°-350°, Tilt: 0°-180° | Pan: 0°-350°, Tilt: 0°-180° | Pan: 0°-350°, Tilt: 0°-180° | |
| Lens Mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | Board mount | |
| Horizontal Viewing Angle | 66.4°-2.68° | 66.4°-2.68° | 66.4°-2.68° | 66.4°-2.61° | 48.9°-3.6° | 48.9°-3.6° | 52.1°-5.9° | 57.8°-6.9° | 49.7°-5.8° | 49.6°-5.6° | |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264, MPEG-4 SP, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams | |
| Wide Dynamic Range | Extreme WDR (107 dB) | Extreme WDR (107 dB) | Extreme WDR (107 dB) | Extreme WDR (107 dB) | Advanced WDR (80 dB) | Advanced WDR (80 dB) | Basic WDR (83.5 dB) | Basic WDR (72 dB) | Basic WDR (69 dB) | Superior WDR (107 dB) | |
| Digital Noise Reduction | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR | DNR | DNR | DNR | DNR | |
| Audio | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | 2-way | |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | RJ-45 | |
| Digital Input/Output | 2/2 | 2/2 | 4/2 | 4/2 | 2/2 | 2/2 | 1/1 | 1/1 | 1/1 | 1/1 | |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | |
| Power Source | DC 12V; High PoE | DC 12V; High PoE | AC 24V; High PoE | AC 24V; High PoE | DC 12V; High PoE | DC 12V; High PoE | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | DC 12V; PoE Class 3 | |
| Environmental Casing | Vandal Resistant (IK09) | Vandal Resistant (IK09) | Weatherproof (IP66); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10) | Weatherproof (IP66); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10) | Vandal Resistant (IK09) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | Weatherproof (IP66); Vandal proof (IK10) | |
| Bundled Accessories | Surface mount; Power adapter | Surface mount; Power adapter | Power adapter | Power adapter | Surface mount; Power adapter | Power adapter | No | No | No | No | |
| Mount Type | Surface, Pendant, Wall, Corner, Pole, Flush | Surface, Pendant, Wall, Corner, Pole, Flush | Pendant, Wall, Corner, Pole | Pendant, Wall, Corner, Pole | Surface, Pendant, Wall, Corner, Pole, Flush | Pendant, Wall, Corner, Pole | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box | |
| Other Value-Added Features | Defogging, Advanced Image Stabilizer | Defogging, Advanced Image Stabilizer | Defogging, Advanced Image Stabilizer | Defogging, Advanced Image Stabilizer | Defogging | Defogging | | | | | |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 | IE 8, IE 9 | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | |
| ONVIF Compliant | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Heater | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | |
| Fan | | | Yes | Yes | | Yes | Yes | Yes | Yes | Yes | |
| Starting Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -10°C ~ 45°C (14°F ~ 113°F) | -30°C ~ 45°C (-22°F ~ 113°F) within 30 minutes | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes | -20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes | |
| Operating Temperature | -10°C ~ 50°C (14°F ~ 122°F) | -10°C ~ 50°C (14°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -10°C ~ 45°C (14°F ~ 113°F) | -40°C ~ 45°C (-40°F ~ 113°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | -20°C ~ 50°C (-4°F ~ 122°F) | |
| Approvals | CE, FCC, IK09 | CE, FCC, IK09 | CE, FCC, IP66, IK09, NEMA 4X | CE, FCC, IP66, IK09, NEMA 4X | CE, FCC, IK09 | CE, FCC, IP66, IK10 | CE, FCC, IP66, NEMA 4X | CE, FCC, IP66, NEMA 4X | CE, FCC, IP66, NEMA 4X | CE, FCC, IP66, NEMA 4X | |



Speed Dome



I95



I96



TCM-6630

| Model | I95 | I96 | TCM-6630 |
|-----------------------------------|--|--|--|
| Product Type | Speed Dome | Speed Dome | Speed Dome |
| Maximum Resolution | 1MP | 2MP | 0.35MP (D1) |
| Application Environment | Outdoor | Outdoor | Outdoor |
| Image Sensor | Progressive Scan CMOS | Progressive Scan CMOS | Interlaced Scan CCD |
| Day / Night | Yes | Yes | Yes |
| Superior Low Light Sensitivity | Yes | Yes | No |
| Minimum Illumination | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.05 lux at F1.6 | Color: 0.1 lux, B/W: 0.01 lux at F1.6 |
| Mechanical IR Cut Filter | Yes | Yes | Yes |
| IR LED | No | No | No |
| Lens | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus | Zoom, f3.4-122.4mm / F1.6-4.5, DC iris, Auto focus |
| Zoom Ratio | 30x optical, 16x digital | 30x optical, 16x digital | 36x optical, 12x digital |
| Panning and Tilting Range | Pan: 0°-360° endless; Tilt: 0°-180° | Pan: 0°-360° endless; Tilt: 0°-180° | Pan: 0°-360° endless; Tilt: -10°-190° |
| Lens Mount | Board mount | Board mount | Board mount |
| Horizontal Viewing Angle | 66.4°-2.68° | 66.4°-2.61° | 57.8°-1.7° |
| Compression | H.264 High Profile, MJPEG | H.264 High Profile, MJPEG | H.264, MPEG-4 SP, MJPEG |
| Maximum Frame Rate vs. Resolution | 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 | 30 fps at 720 x 480 30 fps at 352 x 240 |
| Multi-Streaming | Dual streams | Dual streams | Dual streams |
| Wide Dynamic Range | Extreme WDR (107 dB) | Extreme WDR (107 dB) | Superior WDR |
| Digital Noise Reduction | 2D+3D DNR | 2D+3D DNR | 2D+3D DNR |
| Audio | 2-way | 2-way | 2-way |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour |
| Network Connector | RJ-45 | RJ-45 | RJ-45 |
| Digital Input/Output | 4/2 | 4/2 | 8/1 |
| Local Storage | MicroSDHC/MicroSDXC memory card slot (card not included) | MicroSDHC/MicroSDXC memory card slot (card not included) | No |
| Power Source | AC 24V; High PoE | AC 24V; High PoE | AC 24V |
| Environmental Casing | Weatherproof (IP66); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10) | Weatherproof (IP66); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10) | Weatherproof (IP66) |
| Bundled Accessories | Power adapter | Power adapter | Power adapter |
| Mount Type | Pendant, Wall, Corner, Pole | Pendant, Wall, Corner, Pole | Pendant, Wall, Corner, Pole |
| Other Value-Added Features | Defogging, Advanced Image Stabilizer | Defogging, Advanced Image Stabilizer | |
| Client PC Operating System | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Vista, Windows XP |
| PC Web Browser | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9, IE 10, IE 11, Firefox with Quicktime, Chrome with Quicktime, Safari with Quicktime | IE 8, IE 9 |
| ONVIF Compliant | Yes | Yes | Yes |
| Weight | | | 2800g (6.2lb) |
| Heater | Yes | Yes | |
| Fan | Yes | Yes | |
| Starting Temperature | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes | -45°C ~ 50°C (-49°F ~ 122°F) |
| Operating Temperature | -40°C ~ 50°C (-40°F ~ 122°F) | -40°C ~ 50°C (-40°F ~ 122°F) | -45°C ~ 50°C (-49°F ~ 122°F) |
| Approvals | CE, FCC, IP66, IK09, NEMA 4X | CE, FCC, IP66, IK09, NEMA 4X | CE, FCC, IP66 |









Video Encoder



Video Decoder



| | Video Encoder | Video Decoder | |
|-----------------------------------|---|--|--|
| | | | |
| Model | ACD-2100 | ACD-3100 | ECD-1000 |
| Number of Channels | 1 | 1 | 16 |
| Compression | MPEG-4 SP, MJPEG | MPEG-4 SP, MPEG-4 ASP | H.264 |
| Maximum Frame Rate vs. Resolution | 30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL) 30 fps at 352 x 240 (NTSC) 25 fps at 352 x 288 (PAL) 30 fps at 160 x 112 (NTSC) 25 fps at 176 x 144 (PAL) | 30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL) | 30 fps at 1920 x 1080 30 fps at 720 x 480 25 fps at 720 x 576 30 fps at 640 x 480 |
| Multi-Streaming | Single streams | No | No |
| Wide Dynamic Range | No | No | No |
| Audio | 2-way | 2-way | No |
| Network Protocol & Service | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour | TCP, UDP, IP, HTTP, DHCP, PPPoE, RTP, RTSP |
| Analog Video Input | BNC x 1 | | |
| Analog Video Output | BNC x 1 | BNC x 1; S-Video x 1 | 1, BNC |
| HDMI Output | | | 1, HDMI Type A |
| Digital Input/Output | 2/2 | 2/2 | |
| Serial Port | RS-485, RS-422, RS-232 | RS-485, RS-422, RS-232 | |
| Power Source | DC 12V | DC 12V | DC 12V; PoE Class 3 |
| Bundled Accessories | | | Pole Mount |
| Mount Type | | | Surface, Pole, VESA 10x10 |
| Local Access | | | USB Mouse |
| Remote Access | | Web Client (IE) | Web Client (IE) |
| Event Trigger | | | Video Loss |
| Event Response | | | Beep |
| Client PC Operating System | Windows 7, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Vista, Windows Server 2003, Windows XP | Windows 7, Windows Vista, Windows Server 2003, Windows XP |
| PC Web Browser | IE 6, IE 7, IE 8 | IE 6, IE 7, IE 8 | IE 9 |
| Starting Temperature | | 0°C ~ 50°C (32°F ~ 122°F) | 0°C ~ 50°C (32°F ~ 122°F) |
| Operating Temperature | 0°C ~ 50°C (32°F ~ 122°F) ACD-2100T: -30°C ~ 70°C (-22°F ~ 158°F) | 0°C ~ 50°C (32°F ~ 122°F) | 0°C ~ 50°C (32°F ~ 122°F) |
| Approvals | CE, FCC | CE, FCC | CE, FCC |

|  | Video Management System | | | | |
|---|---|---|---|--|---|
| | Software NVR | | | Central Management System | |
| |  |  |  |  |  |
| Model | NVR 2.3 Ent | NVR 2.3 Pro | NVR 3.0 | CMS 1.1 | CMS 2.0 |
| Maximum Number of Cameras | 64 | 64 | 100 | Unlimited | Unlimited |
| Maximum Number of Clients | 1 local, 5 remote (concurrent) | 1 local | 1 local, 5 remote (concurrent) | 1 local, 5 remote (concurrent) | 1 local, 5 remote (concurrent) |
| Free License | 16 | 64 | 16 | 0 | 0 |
| Video Resolution | Up to 5-Megapixel | Up to 5-Megapixel | Support all ACTi cameras in all resolutions | Up to 5-Megapixel | Support all ACTi cameras in all resolutions |
| Compression | H.264, MPEG-4, MJPEG | H.264, MPEG-4, MJPEG | H.264, MPEG-4, MJPEG | H.264, MPEG-4, MJPEG | H.264, MPEG-4, MJPEG |
| Multi-Streaming | Dual streams | Dual streams | Dual streams | Dual streams | Dual streams |
| Scheduled Recording | Yes | Yes | Yes | | |
| Event Recording | Yes | Yes | Yes | | |
| Manual Recording | Yes | Yes | Yes | Yes | Yes |
| Speed Up | | | Yes | | |
| Dual Stream Management | Yes | Yes | Yes | Yes | Yes |
| Recording Throughput | 64 channels at 5MP/15fps | 64 channels at 5MP/15fps | 100 channels at 5MP/15fps | | |
| Display Layout Mode | 1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64 | 1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64 | 1, 4, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, Custom | 1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64 | 1, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, Custom |
| Digital Zoom | Yes | Yes | Yes | Yes | Yes |
| Event Status | Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full | Display event status upon alarm or when the allocated disk space is full | Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full | Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full | Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full |
| Instant Playback | | | Instant Playback in live view window | | Instant Playback in live view window |
| e-Map | Yes | Yes | Yes | Yes | Yes |
| PTZ Control | Yes | Yes | Yes | Yes | Yes |
| Playback Control | Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop | Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop | Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop | Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop | Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop |
| Synchronized Playback | 4 channels | 4 channels | 64 channels | 4 channels | 64 channels |
| Local Access | monitor, joystick, keyboard & mouse | monitor, joystick, keyboard & mouse | monitor, joystick, keyboard & mouse | monitor, joystick, keyboard & mouse | monitor, joystick, keyboard & mouse |
| Remote Access | Workstation, Web Client (IE), Mobile Client (iOS) | Workstation, Web Client (IE) | Workstation, Web Client (IE), Mobile Client (iOS & Android) | Workstation, Web Client (IE) | Workstation, Web Client (IE), Mobile Client (iOS & Android) |
| Event Trigger | Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery | Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery | Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery; Server loss and recovery; Disk full; Disk not found | Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery | NVR: Source loss and recovery; Schedule service start and stop; Disk status Device: Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery |
| Event Response | Record video; Pop-up window; Hotspot window; Play audio file or Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Event logging; Go to PTZ preset point | Record video; Pop-up window; Hotspot window; Play audio file or Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Event logging; Go to PTZ preset point | Record video; Pop-up window; Hotspot window; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point | Pop-up window; Hotspot window; Play audio file or Beep | NVR: Play beep sound; Execute system command to activate other programs; E-mail notification Device: Pop-up window with live video; Switch to hotspot window; Play beep sound |
| Permission Control | Unlimited number of users, Active Directory, Customizable permissions for user groups | Unlimited number of users, Active Directory, Customizable permissions for user groups | Unlimited number of users, Active Directory, Customizable permissions for user groups | Unlimited number of users, Active Directory, Customizable permissions for user groups | Unlimited number of users, Active Directory, Customizable permissions for user groups |
| Server Operating System | Windows 7 | Windows 7 | Windows 8, Windows 7, Windows Server 2012 | Windows 7 | Windows 8, Windows 7, Windows Server 2012 |
| Client PC Operating System | Windows 7 | Windows 7 | Windows 8, Windows 7, Windows Server 2012 | Windows 7 | Windows 8, Windows 7, Windows Server 2012 |
| PC Web Browser | IE 8, IE 9 | IE 8, IE 9 | IE 8, IE 9, IE 10 | IE 8, IE 9 | IE 8, IE 9, IE 10 |
| ONVIF Compliant | No | No | Yes (Support ONVIF Compliant cameras with NVR3 v3.0.08 or newer version) | No | Yes (Support ONVIF Compliant cameras with CMS2 v2.0.07 or newer version) |