Milesight

# AI 23X/30X/36X/42X Speed Dome Network Camera

NDAA

IP66

AI · H.265+ HEVC · Starlight · Super WDR · IR · Privacy Masking · SD XC · GQST ONVIF · PoE · Weather-proof

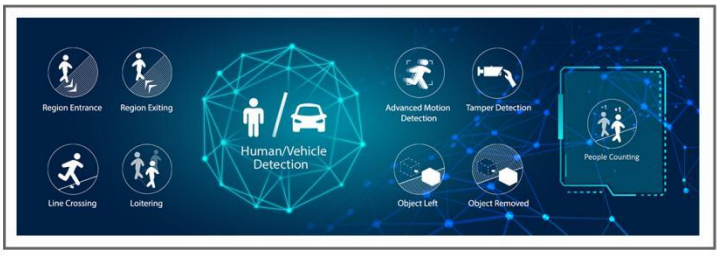
DATASHEET

## KEY FEATURES

- NDAA Compliance (The fully NDAA-compliant products are well suited for government, defense and a range of projects subject to the NDAA.)
- Smart IR II (Combining the High Beam and Low Beam to adjust IR intensity to fit different lighting conditions.)
- 120dB Super WDR (Excellent performance even when the ratio of the luminosity of brightest and darkest is up to 120dB.)
- 90fps High Frame Rate (Camera can easily catch images with no latency despite of the high-speed movement.)
- Smart PTZ Motion Detection (Pan and tilt to the position of motion detected area automatically and zoom in synchronously.)
- IR Distance up to 300m (Enabling 300 meters distinct images at night with IR LEDs.)
- 300 Preset Positions (The user can easily control the lens position via mouse to monitor interested area and set up to 300 preset positions for patrolling.)
- Keyboard Control (Shortcut keys for PTZ control via Keyboard.)
- Smart Stream (Bandwidth, storage and bit rate are saved with Smart Stream On, eg, H.265+ saves 70%~80% bandwidth that of H.264.)

### AI Video Analytics

- 8 intelligent VCA modes powered by AI engine, which can intelligently filter objects to focus on human and vehicle detection.
- People Counting technology provides high accuracy and real-time data based on AI algorithm with statistic reports.




### 30fps@4K

Providing 4K HD resolution with frame rate of 30fps, the camera performs well in catching detailed image regardless of the moving speed.

### 0.002Lux Ultra Low-light

The starlight camera is able to deliver high detailed color images even in low light environment reaching 0.002Lux(Color) or 0Lux(B/W), and near infrared light environments without any supplementary lighting.

### Up to 42X Optical Zoom

Embedded with optical zoom lens, the cameras' resolution is up to 42X optical zoom which allows the user to zoom up to distant objects while still maintaining the clarity and delivering high quality video over the entire zoom range.

# AI 23X/30X/36X/42X Speed Dome Network Camera

| | Model | MS-C2841-X36TPA (2MP) | MS-C2941-X23TPA (2MP) | MS-C2941-X30TPA (2MP) | MS-C2941-X42TPA (2MP) |
|---|---|---|---|---|---|
| **Camera** | Image Sensor | 1/2" Progressive Scan CMOS | 1/2.8" Progressive Scan CMOS | | |
| | Min. Illumination | Color: 0.002Lux@F1.55<br>B/W: 0Lux with IR on | Color: 0.005Lux@F1.5<br>B/W: 0Lux with IR on | | Color: 0.005Lux@F1.8<br>B/W: 0Lux with IR on |
| | WDR | 120dB Super WDR | | | |
| | Shutter Time | 1/100000s~1s | | | |
| | Digital Zoom | 16X | | | |
| | Day/Night Mode | Day/Night/Auto/Customize/Schedule | | | |
| | S/N | >55dB | | | |
| **Lens** | Focal Length | 5.7~205.2mm,<br>**36X** Optical Zoom | 5~117mm,<br>**23X** Optical Zoom | 4.7~141mm,<br>**30X** Optical Zoom | 7~300mm,<br>**42X** Optical Zoom |
| | Zoom Speed | Approx 7s (Wide-Tele) | Approx 6s (Wide-Tele) | Approx 6s (Wide-Tele) | Approx 7s (Wide-Tele) |
| | Field of View | H63°~H3°/D69°~D3°/<br>V38°~V1° | H60°~H3°/D69°~D4°/<br>V35°~V2° | H62°~H3°/D70°~D3°/<br>V37°~V1° | H45°~H2°/D50°~D2°/<br>V27°~V1° |
| | Focus Control | Auto/Semi-Auto/Manual | | | |
| | Minimum Working Distance | 1500/1500mm (Wide/Tele) | 100/1500mm<br>(Wide/Tele) | 100/1500mm<br>(Wide/Tele) | 1200/1500mm<br>(Wide/Tele) |
| | Aperture | F1.55~F4.8 | F1.5~F3.5 | F1.5~F4.0 | F1.8~F6.5 |
| | Iris Control | Auto | | | |
| **PTZ** | Pan Range/Pan Speed | 360°endless / Pan Manual Speed: 0.1°~250°/s, Pan Preset Speed: 250°/s | | | |
| | Tilt Range/Tilt Speed | -5°~90°(Auto Flip) / Tilt Manual Speed: 0.1°~160°/s, Tilt Preset Speed: 160°/s | | | |
| | Proportional Zoom | Support | | | |
| | Preset Quantity | 300 | | | |
| | Patrol | 8 Patrols, up to 48 presets each patrol | | | |
| | Pattern | 4 Patterns | | | |
| | Power Off Memory | Support | | | |
| | Other Function | Auto Scan, Auto Home, Preset Freezing, 3D Positioning, PTZ Limits, Initial Position | | | |
| **IR** | IR Distance | Up to 300m | Up to 200m | Up to 200m<br>Up to 300m(Wiper Version) | Up to 300m |
| | IR Angle | Auto/Manual | | | |
| **Video** | Max. Image Resolution | 1920x1080 | | | |
| | Primary Stream | 60Hz/50Hz: 90fps@(1920x1080, 1280x960, 1280x720, 704x576) | | | |
| | Secondary Stream | 60Hz: 90fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x180) | | | |
| | Tertiary Stream | 60Hz: 30fps@(1280x720, 704x576, 640x480, 640x360, 320x240, 320x180)<br>50Hz: 25fps@(1280x720, 704x576, 640x480, 640x360, 320x240, 320x180) | | | |
| | Video Compression | H.265⁺/H.265(HEVC)/H.264⁺/H.264/MJPEG | | | |
| | Video Bit Rate | 16Kbps~16Mbps(CBR/VBR Adjustable) | | | |
| | Privacy Masking | Up to 24 areas | | | |
| | ROI | Up to 8 areas | | | |
| | Image Setting | Brightness/Contrast/Saturation/Sharpness | | | |

# AI 23X/30X/36X/42X Speed Dome Network Camera

| | | | | |
|---|---|---|---|---|
| **Interface** | Ethernet | 1*RJ45 10M/100M Ethernet Port | | |
| | Audio I/O | 1/1 | | |
| | Alarm I/O | 4/2 | | |
| | RS485 | Support | | |
| **Network** | Network Storage | NAS(Support NFS, SMB/CIFS), ANR | | |
| | Protocol | IPv4/IPv6, ARP, TCP, UDP, RTCP, RTP, RTSP, RTMP, HTTP, HTTPS, DNS, DDNS, DHCP, FTP, NTP, SMTP, SNMP, UPnP, Bonjour, SIP, PPPoE, VLAN, 802.1x, QoS, IGMP, ICMP, SSL | | |
| **Audio** | Audio Compression | G.711/AAC/G.722/G.726 | | |
| | Audio Sampling Rate | 8/16/32/44.1/48KHz | | |
| | Audio Bit Rate | 16~256kbps | | |
| | Two-way Audio | Support | | |
| **Intelligent Analytics** | Video Analysis | Region Entrance, Region Exiting, Advanced Motion Detection, Tamper Detection, Line Crossing, Loitering, Object Left, Object Removed | | |
| | People Counting& Report | Count the number of people entering or exiting, up to 4 detection areas for regional people counting | | |
| **System** | Storage | Support microSD/SDHC/SDXC Card Local Storage, up to 256G | | |
| | Advanced Function | BLC, HLC, 2D DNR, 3D DNR, AWB, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark | | |
| | SIP/VoIP Support | Yes, Voice & Video-over-IP | | |
| | Event Trigger | Motion Detection, Network Disconnection, External Input, Audio Alarm, etc. | | |
| | Event Action | FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, PTZ Motion, HTTP Notification, etc. | | |
| | System Compatibility | ONVIF Profile G & Q & S & T, API | | |
| **General** | Working Condition | Temperature: -40℃~60℃ / Humidity: 0~90%(Non-condensing) | | |
| | Power Supply | PoE (802.3at) / AC 24V/3A±10% | | |
| | Power Consumption | 13W MAX / 24W MAX (With IR on) | 12W MAX / 24W MAX (With IR on) | 12W MAX / 23W MAX (With IR on) |
| | Weather Proof/Housing | Up to IP66-rated for Weather-resistant Performance / Vandal-proof IK10-rated Metal Housing(Optional) | | |
| | Heater | Support | | |
| | Wiper (Optional) | Support | - | Support |
| | Surge Protection | 6KV | | |
| | Dimensions/Weight | Φ205mmX308mm/4Kg | | |
| | Warranty | 2 Years / 3 Years (Optional) | | |

# AI 23X/30X/36X/42X Speed Dome Network Camera

| | Model | MS-C8241-X36PA (4K) |
|---|---|---|
| **Camera** | Image Sensor | 1/1.8" Progressive Scan CMOS |
| | Min. Illumination | Color: 0.009Lux@F1.55<br>B/W: 0Lux with IR on |
| | WDR | 120dB Super WDR |
| | Shutter Time | 1/100000s~1s |
| | Digital Zoom | 16X |
| | Day/Night Mode | Day/Night/Auto/Customize/Schedule |
| | S/N | >55dB |
| **Lens** | Focal Length | 5.7~205.2mm,<br>**36X** Optical Zoom |
| | Zoom Speed | Approx 7s (Wide-Tele) |
| | Field of View | H66°~H3°/D72°~D3°/V41°~V1° |
| | Focus Control | Auto/Semi-Auto/Manual |
| | Minimum Working Distance | 1500/1500mm (Wide/Tele) |
| | Aperture | F1.55~F4.8 |
| | Iris Control | Auto |
| **PTZ** | Pan Range/Pan Speed | 360°endless / Pan Manual Speed: 0.1°~250°/s, Pan Preset Speed: 250°/s |
| | Tilt Range/Tilt Speed | -5°~90°(Auto Flip) / Tilt Manual Speed: 0.1°~160°/s, Tilt Preset Speed: 160°/s |
| | Proportional Zoom | Support |
| | Preset Quantity | 300 |
| | Patrol | 8 Patrols, up to 48 presets each patrol |
| | Pattern | 4 Patterns |
| | Power Off Memory | Support |
| | Other Function | Auto Scan, Auto Home, Preset Freezing, 3D positioning, PTZ Limits, Initial Position |
| **IR** | IR Distance | Up to 300m |
| | IR Angle | Auto/Manual |
| **Video** | Max. Image Resolution | 3840x2160 |
| | Primary Stream | 60Hz: 30fps@(3840x2160, 3072x2048, 2592x1944, 2592x1520, 2048x1536, 1920x1080, 1280x960, 1280x720, 704x576)<br>50Hz: 25fps@(3840x2160, 3072x2048, 2592x1944, 2592x1520, 2048x1536, 1920x1080, 1280x960, 1280x720, 704x576) |
| | Secondary Stream | 60Hz: 30fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x180)<br>50Hz: 25fps@(704x576, 640x480, 640x360, 352x288, 320x240, 320x180) |
| | Tertiary Stream | 60Hz: 30fps@(1280x720, 704x576, 640x480, 640x360, 320x240, 320x180)<br>50Hz: 25fps@(1280x720, 704x576, 640x480, 640x360, 320x240, 320x180) |
| | Video Compression | H.265+/H.265(HEVC)/H.264+/H.264/MJPEG |
| | Video Bit Rate | 16Kbps~16Mbps(CBR/VBR Adjustable) |
| | Privacy Masking | Up to 24 areas |
| | ROI | Up to 8 areas |
| | Image Setting | Brightness/Contrast/Saturation/Sharpness |

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| | RS485 | Support |
| **Network** | Network Storage | NAS(Support NFS, SMB/CIFS), ANR |
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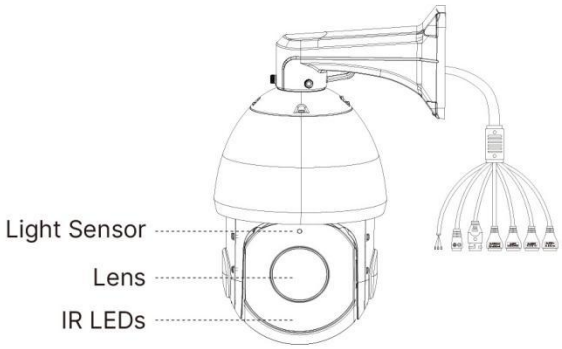
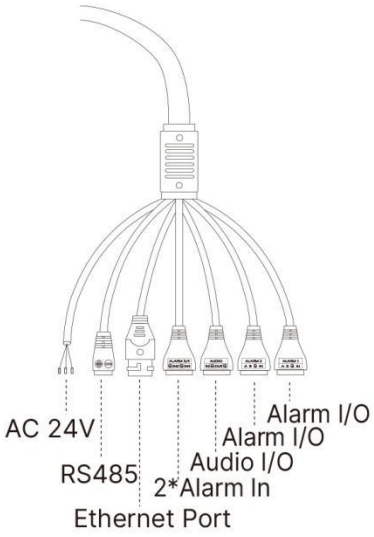
| | Advanced Function | BLC, HLC, 2D DNR, 3D DNR, AWB, IP Address Filtering, AGC, Anti-flicker, Corridor Mode, Deblur, Watermark |
| | SIP/VoIP Support | Yes, Voice & Video-over-IP |
| | Event Trigger | Motion Detection, Network Disconnection, External Input, Audio Alarm, etc. |
| | Event Action | FTP Upload, SMTP Upload, SD Card Record, External Output, SIP Phone, PTZ Motion, HTTP Notification, etc. |
| | System Compatibility | ONVIF Profile G & Q & S & T, API |
| **General** | Working Condition | Temperature: -40℃~60℃ / Humidity: 0~90%(Non-condensing) |
| | Power Supply | PoE (802.3at) / AC 24V/3A±10% |
| | Power Consumption | 12W MAX / 23W MAX (With IR on) |
| | Weather Proof/Housing | Up to IP66-rated for Weather-resistant Performance / Vandal-proof IK10-rated Metal Housing(Optional) |
| | Heater | Support |
| | Wiper (Optional) | Support |
| | Surge Protection | 6KV |
| | Dimensions/Weight | Φ205mmX308mm/4Kg |
| | Warranty | 2 Years / 3 Years (Optional) |

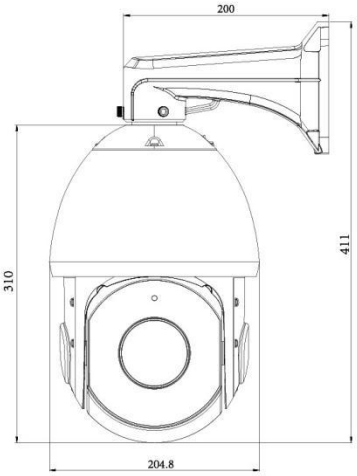
V8.03

# AI 23X/30X/36X/42X Speed Dome Network Camera

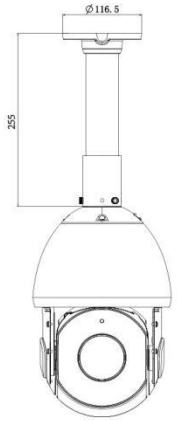
## Structure Diagrams




Wall Mount




Ceiling Mount

Units: mm

## Accessories Support

A01 Pole Mount

Weight: 720g
Dimensions: 170*51.5*152.6mm

A03 External Corner Bracket

Weight: 900g
Dimensions: 170*152.5*76.3mm

A41 Wall Mount

Weight: 400g
Dimensions: 200*129*100mm

A42 Pendant Mount

Weight: 650g
Dimensions: 116.5*255mm

A42-L Extension Lever

Weight: 325g
Dimension: 57*255mm

A43 Junction Box

Weight: 1000g
Dimensions: 195*164*80mm

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