



## IPTZ1016 4MP 40X IR NETWORK PTZ CAMERA

### FEATURES

- IEC61850-3\*, IP66, IK10, Substation rated Camera
- High Definition 1080p 60fps / 30fps
- Up to 250m (820ft) IR distance
- Available with fiber or copper network port

### KEY BENEFITS

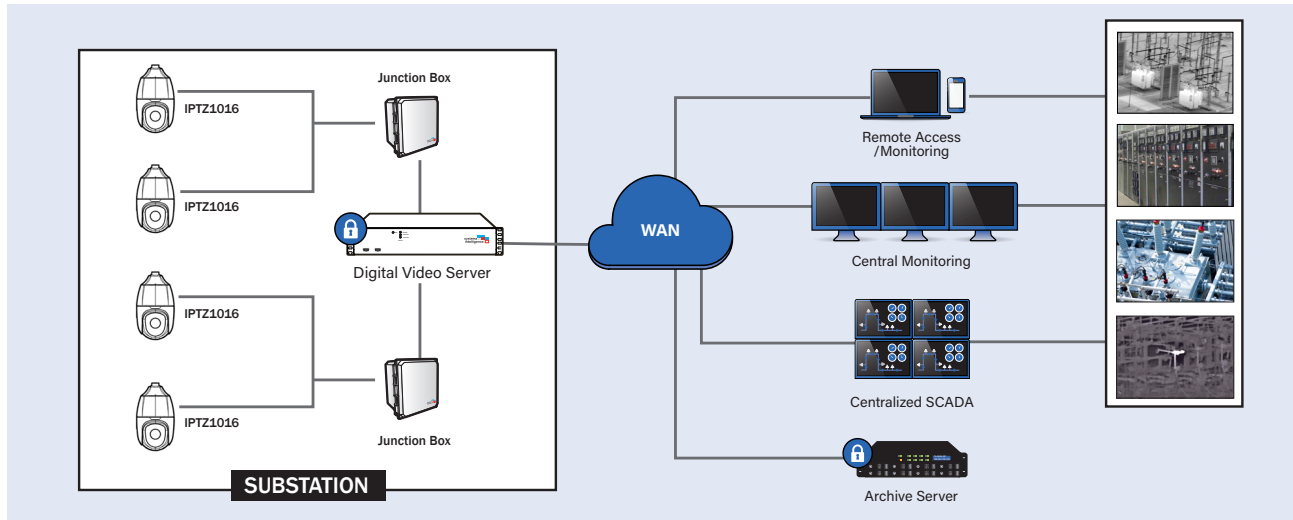
- High Reliability Operation in Extreme Environments
- Clear Day and Night Vision
- Optimized Bandwidth for Remote Locations
- Detailed real-time substation visualization

The Systems With Intelligence IPTZ1016 Pan/Tilt/Zoom camera provides clear, high definition images from environmentally challenging, remote locations. The IPTZ1016 can be used for safety, security and asset monitoring applications in unmanned industrial sites such as electrical power substations, wind and solar farms and oil and gas sites. With built in Pan/ Tilt/Zoom presets, the IPTZ1016 patrols the site automatically to capture events. The user can take command of the camera remotely to zoom in and capture up close details of equipment or people on site with the 40X zoom lens. The onboard long range infrared illuminators allow the IPTZ1016 to capture clear images both day and night. The environmental ratings of the IPTZ1016 make it ideal for the most reliable operation in harsh conditions.

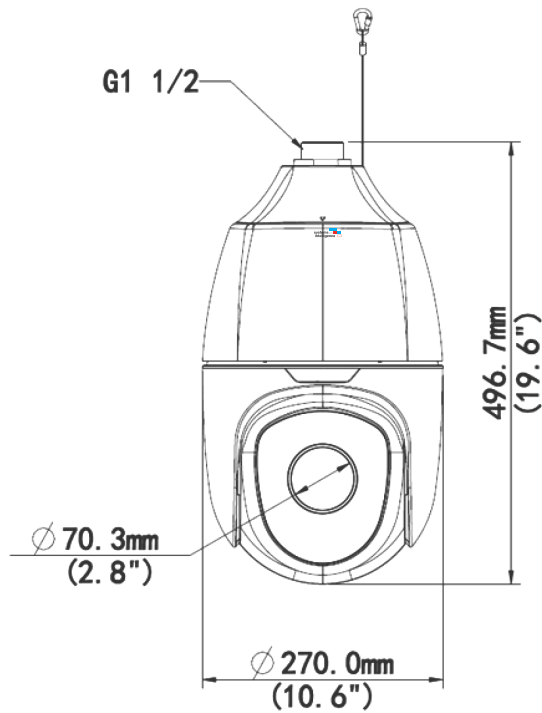
\* Note: EMC/EMI portion. Support from CJB400X Junction Box is required to meet the standard.



# TYPICAL NETWORK ARCHITECTURE



# DIMENSIONS



All units in millimeters (inches)



# TECHNICAL SPECIFICATIONS

| SPECIFICATIONS          |   |                   |                  |                 |                 |
|-------------------------|---|-------------------|------------------|-----------------|-----------------|
| CAMERA                  |   |                   |                  |                 |                 |
| Sensor                  | 1/1.8", 4.0 megapixel, progressive scan, CMOS   |                   |                  |                 |                 |
| Minimum Illumination    | Colour: 0.0005Lux (F1.3, AGC ON)<br>0Lux with IR  |                   |                  |                 |                 |
| Day/Night               | IR-cut filter with auto switch (ICR)  |                   |                  |                 |                 |
| Shutter                 | Auto/Manual, 1 ~ 1/100000s  |                   |                  |                 |                 |
| WDR                     | 120dB   |                   |                  |                 |                 |
| S/N                     | >56dB   |                   |                  |                 |                 |
| Lens                    |   |                   |                  |                 |                 |
| Lens type               | 5.7 ~ 228mm, AF automatic focusing and motorized zoom lens  |                   |                  |                 |                 |
| Digital Zoom            | 16  |                   |                  |                 |                 |
| Optical Zoom            | 40X   |                   |                  |                 |                 |
| Iris                    | Auto; F1.3 ~ F4.6   |                   |                  |                 |                 |
| Angle of View (H)       | 59.5° ~ 2.2°  |                   |                  |                 |                 |
| Angle of View (V)       | 35.6° ~ 1.2°  |                   |                  |                 |                 |
| Angle of View (O)       | 70.2° ~ 2.6°  |                   |                  |                 |                 |
| DORI                    |   |                   |                  |                 |                 |
| DORI Distance           | Lens (mm)   | Detect (m)        | Observe (m)      | Recognize (m)   | Identify (m)    |
|                         | 5.7   | 107.2(351.8ft)    | 42.9(140.7ft)    | 21.4(70.4ft)    | 10.7(35.2ft)    |
|                         | 228   | 3330.6(10927.2ft) | 1332.2(4370.9ft) | 666.1(2185.4ft) | 333.1(1092.7ft) |
| Illuminator             |   |                   |                  |                 |                 |
| IR Range                | Up to 250m (820 ft) IR range  |                   |                  |                 |                 |
| Wavelength              | 850nm   |                   |                  |                 |                 |
| IR On/Off Control       | Auto/Manual   |                   |                  |                 |                 |
| Video                   |   |                   |                  |                 |                 |
| Video Compression       | Ultra 265, H.265, H.264, MJPEG  |                   |                  |                 |                 |
| Frame Rate              | Main Stream: 4MP (2688*1520), Max 30fps;<br>Sub Stream: 2MP (1920*1080), Max 30fps;<br>Third Stream: D1 (720*576), Max 30fps<br>Fourth Stream: D1 (720*576), Max 30fps<br>Fifth Stream: D1 (720*576), Max 30fps |                   |                  |                 |                 |
| Video Bit Rate          | 128 Kbps~16 Mbps  |                   |                  |                 |                 |
| H.264 Type              | Baseline Profile/Main Profile/High Profile  |                   |                  |                 |                 |
| H.265 Type              | Main Profile  |                   |                  |                 |                 |
| U-code                  | Support   |                   |                  |                 |                 |
| ROI                     | Up to 8 areas   |                   |                  |                 |                 |
| Video stream            | Five streams  |                   |                  |                 |                 |
| OSD                     | Up to 8 OSDs  |                   |                  |                 |                 |
| Privacy Mask            | Up to 24 blacks (Up to 4 blacks in the same picture)  |                   |                  |                 |                 |
| Image                   |   |                   |                  |                 |                 |
| White Balance           | Auto/Outdoor/Fine Tune/Sodium Lamp/Locked/Auto2   |                   |                  |                 |                 |
| Digital noise reduction | 2D/3D DNR   |                   |                  |                 |                 |



## TECHNICAL SPECIFICATIONS (CONT'D)

| SPECIFICATIONS         |  |
|------------------------|--|
| Flip                   | Normal/Flip Vertical/Flip Horizontal/180°/90°Clockwise/90°Anti-clockwise   |
| EIS                    | N/A  |
| HLC                    | Support  |
| BLC                    | Support  |
| Defog                  | Optical Defog & Digital Defog  |
| Events                 |  |
| General Function       | Watermark, IP Address Filtering, Alarm input, Alarm output, Access Policy, ARP Protection, RTSP Authentication, User Authentication  |
| Audio                  |  |
| Audio Compression      | G.711U,G.711A  |
| Audio Bitrate          | 64 Kbps  |
| Two-way audio          | Support  |
| Suppression            | Support  |
| Sampling Rate          | 8KHZ   |
| Storage                |  |
| Edge Storage           | Micro SD, up to 256GB  |
| Network Storage        | ANR,NAS(NFS)   |
| Network                |  |
| Protocols              | IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, PPPoE, RTP, RTSP, RTCP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, 802.1x, SNMP, QoS, RTMP, SSL/TLS  |
| Compatible Integration | ONVIF (Profile S, Profile G, Profile T), API, SDK  |
| User/Host              | Up to 32 users. 2 user levels: administrator and common user   |
| Security               | Password protection, strong password, HTTPS encryption, Export operation logs, basic and digest authentication for RTSP, digest authentication for HTTP, TLS 1.2, WSSE and digest authentication for ONVIF |
| Client                 | EZStation<br>Ezview<br>EZLive  |
| Web Browser            | Plug-in required live view: IE9+, Chrome 41 and below, Firefox 52 and below  |
| Pan & Tilt             |  |
| Pan Range              | 360° (endless)   |
| Pan Speed              | 0.1°/s ~ 180°/s  |
|                        | Preset speed: 300°/s   |
| Tilt Range             | -15° ~ 90° (auto reverse)  |
| Tilt Speed             | 0.1° ~ 180°  |
|                        | Preset speed: 240°/s   |
| Number of Presets      | 1024   |
| Patrol                 | Preset patrol, route patrol, recorded patrol   |
| Patrol Stay Time       | 15s~1800s  |
| Preset Image Freeze    | Support  |
| Home Position          | Support  |



## TECHNICAL SPECIFICATIONS (CONT'D)

| SPECIFICATIONS      |  |
|---------------------|--|
| Interface           |  |
| Audio I/O           | 1/1  |
| Alarm I/O           | 7/2  |
| Serial Port         | 1 RS485  |
| Built-in Mic        | N/A  |
| Built-in Speaker    | N/A  |
| WIFI                | N/A  |
| Network             | 1*100M/1000M Base-FX SFP + 1*10M/100M Base-TX Ethernet   |
| Video output        | 1 BNC  |
| Certification       |  |
| EMC                 | FCC CFR 47 Part 15<br>EN 55032:2015<br>EN 55024:2010<br>EN 61000-3-2:2014<br>EN 61000-3-3-2013 |
| Safety              | IEC 62368-1<br>EN 62368-1<br>UL 60950-1  |
| Environment         | CE-ROHS (2011/65/EU;(EU)2015/863); WEEE (2012/19/EU); REACH (Regulation (EC) No 1907/2006)     |
| Protection          | Ingression protection: IP66 (IEC 60529-2013)   |
| General             |  |
| Power               | AC 24V ±25%, DC 24V±25%  |
|                     | Power consumption: Max 61W   |
| Power Interface     | Wires with cold-pressed terminal   |
| Dimensions (Ø x H)  | Ø270 x 497mm (Ø10.6" x 19.6")  |
| Weight              | 9.5kg(20.9lb)  |
| Working Environment | -40°C ~ 70°C (-40°F ~ 158°F), Humidity: ≤95% RH (non-condensing)                               |
| Storage Environment | -40°C ~ 70°C (-40°F ~ 158°F), Humidity: ≤95% RH (non-condensing)                               |
| Surge Protection    | 6KV  |
| Vandal Resistant    | N/A  |
| Ingress Protection  | IP66   |
| Reset Button        | Support  |

## JUNCTION BOX

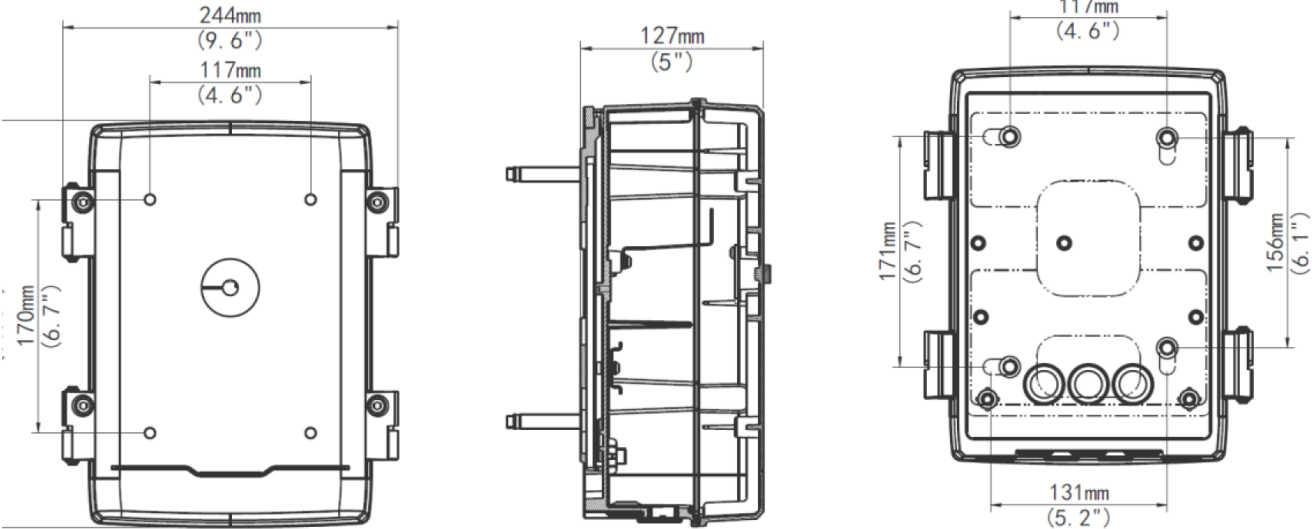
Outdoor or indoor cable junction box for PTZ Dome series, Option A20

- 296mm x 244mm x 127mm (11.7" x 9.6" x 5")
- 2.5kg (5.5lb)
- Made of aluminum alloy





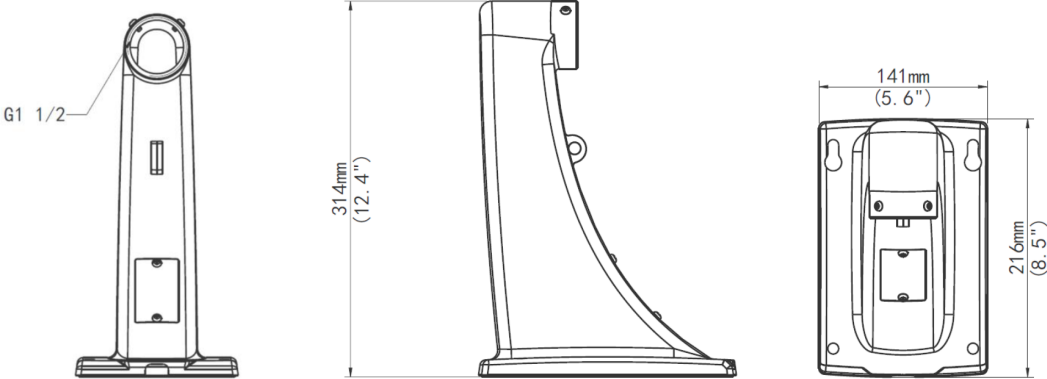
# JUNCTION BOX DIMENSIONS



# MOUNTING OPTIONS

## Wall Mount with Cable Feedthrough, Option A20

- Indoor or outdoor, PTZ dome pendant installation
- Wall or vertical structure
- Made of cast aluminum alloy

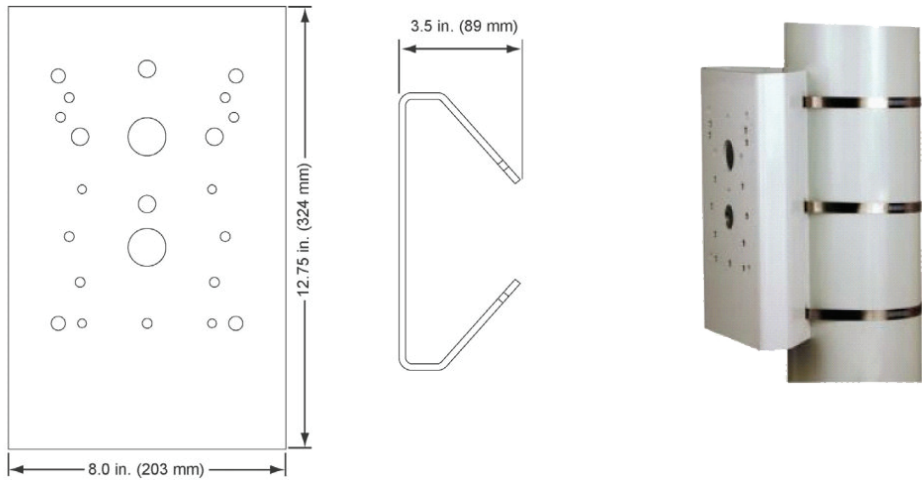




# MOUNTING OPTIONS (CONT'D)

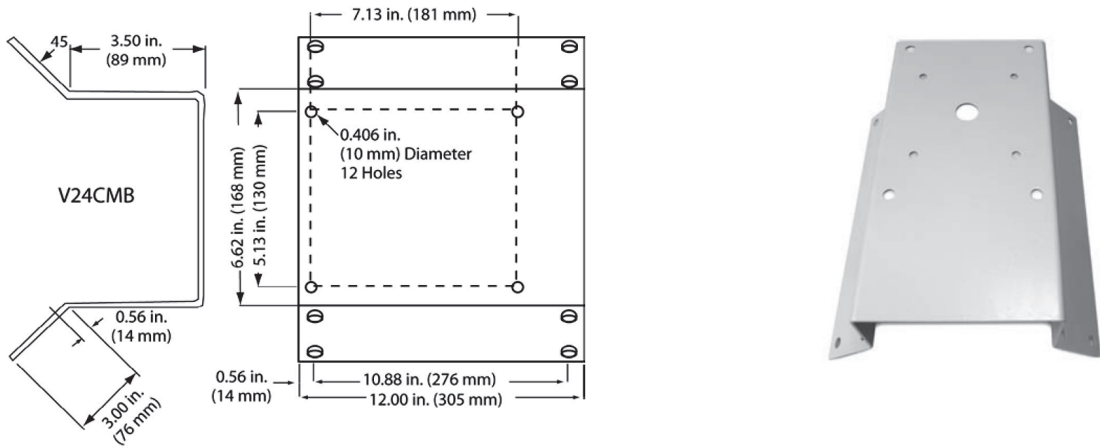
## Pole Mount Adapter, Option A10

- Minimum pole diameter: 4 in.
- Maximum pole diameter: 10 in.
- Made of aluminum



## Corner Mount Adapter, Option A11

- Corrosion-protected steel construction
- Height: 6.6 in. (168mm)
- Width: 12 in. (305mm)

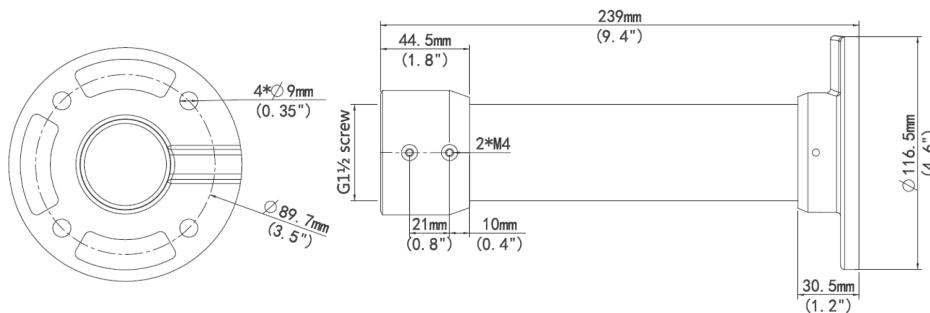




## MOUNTING OPTIONS (CONT'D)

### Pendant Mount, Option A14

- Indoor or outdoor, PTZ dome pendant installation
- Made of aluminum alloy
- Unit weight: 0.67kg (1.5lb)



## CONFIGURATION



| BASE UNIT     | DESCRIPTION                                 |
|---------------|---|
| S             | High Speed, 40x Zoom, IP PTZ, Dome Camera   |
| CAMERA ARM    |   |
| AXX           | No Arm                                      |
| A10           | Pole Mount Adapter with Cable Feedthrough   |
| A11           | Corner Mount Adapter with Cable Feedthrough |
| A14           | Pendant Mount with Cable Feedthrough        |
| A20           | Wall Mount with Cable Feedthrough           |
| ETHERNET PORT |   |
| C01           | RJ45 10M/100M/1000M Base-TX                 |
| LC1           | 100FX, multimode, 2km, LC interface         |
| CABLE LENGTH  |   |
| CL05          | 5 feet of communications and power cable    |
| CL10          | 10 feet of communications and power cable   |
| CL30          | 30 feet of communications and power cable   |
| CL45          | 45 feet of communications and power cable   |

**NOTE: Mounting Hardware:** All mounting hardware brackets and arms will be dependant on the specific installation. SWI application engineers will determine the best options.



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