

## DC-D6831WRA

# H.265 8MP AI IR Dome Camera (Edge AI Plus & Lightmaster NIR)

NDAA & TAA Compliant



## 4K AI DOME CAMERA WITH DEEP LEARNING ANALYTICS AND HIGH-LEVEL SECURITY

The DC-D6831WRA features a 1/1.8" CMOS sensor delivering 4K (8MP) resolution at 30fps, ensuring clear visibility in various lighting conditions with 120dB True WDR and a 60m IR range. Equipped with deep learning-based IDLA and IDLA Pro engines, it provides advanced video analytics, including object attribute extraction (human, vehicle, face) and detection of falls or crowding. The camera meets FIPS 140-3 Level 3 security standards and holds IP67, IK10, and NEMA4X certifications, ensuring data integrity and operational stability in harsh environments. It is an ideal solution for public institutions, critical infrastructure, and city surveillance where precise identification and high-level security are required.

## KEY FEATURES

- IDIS Edge AI Plus Camera
- Lightmaster NIR
- Easy installation with DirectIP NVR
- H.265 and Intelligent Codec
- Remote Motorized Focus and Zoom
- 12V DC, PoE (IEEE 802.3af Class 3)
- IR LED (Distance: 60m / 196.9ft)
- IDIS Deep-Learning Analytics (IDLA), IDIS Deep-Learning Analytics Pro (IDLA Pro)
- Attribute Support(Human, Vehicle, Face), A-cut Support
- IK10
- IP67
- Smart Failover (Up to 512GB)
- Supports ONVIF
- True WDR
- Alarm in / out

## DC-D6831WRA | Datasheet

### VIDEO

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor             | 1/1.8" CMOS                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Max. Resolution          | 3840 x 2160                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Scanning Mode            | Progressive Scan                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Lens Type                | Motorized Vari-focal                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Focal Length             | 4.3 ~ 9.8mm                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Aperture                 | F1.6 ~ F2.6                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Iris Control             | P-Iris                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Angular Field of View    | Wide : 110.4°(H) 57.8°(V) 133.8°(D) Tele : 45.0°(H) 25.2°(V) 51.8°(D)                                                                                                                                                                                                                                                                                                                                                                               |
| Min. Illumination        | COLOR : 0.13 lux @ F1.6 B/W : 0 lux (IR LED ON)                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dynamic Range            | 120dB (True WDR)                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Electronic Shutter Speed | Auto / Manual (1/30 ~ 1/10,000), Anti-Flicker, Slow Shutter (1/7.5, 1/15)                                                                                                                                                                                                                                                                                                                                                                           |
| Day and Night            | Yes (ICR)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| IR Distance (LEDs)       | 60m / 196.9ft (6ea)                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Image Setting            | Exposure, White Balance, Self-Adjusting Video Mode(Sharpness, Contrast, Colors, Brightness Control)                                                                                                                                                                                                                                                                                                                                                 |
| Backlight Compensation   | BLC                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Mirroring / Pivot        | Horizontal / Vertical / Pivot                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Image Stabilizer         | Yes (EIS)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| De-fog                   | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Privacy Masking          | 8 Zones                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Intelligent Video        | A-cut Support Object Metadata: Human, Vehicle, Face Object Attribute: Human[Gender, Age, Bag, Hat, Colors], Vehicle[Car, Truck, Bus, Bike(Bicycle, Motorcycle), ETC, Colors], Face[Gender, Age, Glasses, Hat, Mask] IDLA: Object Detection, Intrusion, Loitering, Line Crossing, Face Detection IDLA Pro: Crowd Detection, Abandoned Object Detection, Removed Object Detection, Fall Detection ETC: Video Motion Detection, Active Tampering Alarm |
| Video Out                | 1 CVBS                                                                                                                                                                                                                                                                                                                                                                                                                                              |

### PAN/TILT/ROTATE

|              |              |
|--------------|--------------|
| Pan Range    | -180° ~ 180° |
| Tilt Range   | -45° ~ 80°   |
| Rotate Range | -143° ~ 203° |

### NETWORK

|                   |                           |
|-------------------|---------------------------|
| Video Compression | H.265, H.264 (MP), M-JPEG |
|-------------------|---------------------------|

|                                   |                                                                                                                                                                                                         |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intelligent Codec                 | Yes                                                                                                                                                                                                     |
| Bitrate Control                   | H.265 - CBR / VBR, H.264 - CBR / VBR                                                                                                                                                                    |
| Audio Compression                 | Opus, ADPCM 16K, G.726, G.711 u-Law, G.711 a-Law                                                                                                                                                        |
| Two-way Audio                     | Yes                                                                                                                                                                                                     |
| IP Camera Protocol                | DirectIP 2.0, ONVIF Profile S/T/M                                                                                                                                                                       |
| Max. Frame Rate                   | 30ips : 3840 x 2160(WDR)                                                                                                                                                                                |
| Supported Resolution              | 3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360                                                                                                                                                         |
| Multi-video Streaming             | Quadruple Streaming                                                                                                                                                                                     |
| Network Protocols                 | DirectIP 2.0 Protocol, IPv4, IPv6, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/UDP RTSP/TCP, HTTP, HTTPS, FTP, SMTP, FEN, mDNS, uPNP, SNMPv2                                                                   |
| Security                          | FIPS 140-3 Level 3, Digest authentication, Password Protection, Brute force delay protection, User access log, IP Filtering, IEEE802.1x(EAP-TLS), Chained Fingerprint, SSL Encryption, HTTPS Encryption |
| Ethernet                          | RJ45 (10/100BASE-T)                                                                                                                                                                                     |
| Recording Session Buffer (NLTSec) | Yes (Up to 60MB)                                                                                                                                                                                        |
| Edge Storage                      | micro SD/SDHC/SDXC, Smart Failover (Up to 512GB)                                                                                                                                                        |

## ALARM AND EVENT

|                    |                                                                                                                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trigger Event      | Motion Detection, Alarm in, Audio detection, Tampering, Object Detection, Intrusion, Loitering, Line Crossing, Face Detection, Crowd detection, Abandoned object detection, Removed object detection, Fall detection |
| Event Notification | Remote S/W, Email (with Image)                                                                                                                                                                                       |
| Audio Alarm        | Yes                                                                                                                                                                                                                  |
| Audio In / Out     | 1 / 1                                                                                                                                                                                                                |
| Alarm In / Out     | 1 / 1                                                                                                                                                                                                                |

## ENVIRONMENTAL

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Vandal Proof Casing   | IK10                                                              |
| Outdoor Ready         | IP67, NEMA4X                                                      |
| Operating Temperature | -40°C ~ +55°C (-40°F ~ +131°F) *Starting up at above -20°C (-4°F) |
| Operating Humidity    | 0% ~ 90%                                                          |

## ELECTRICAL

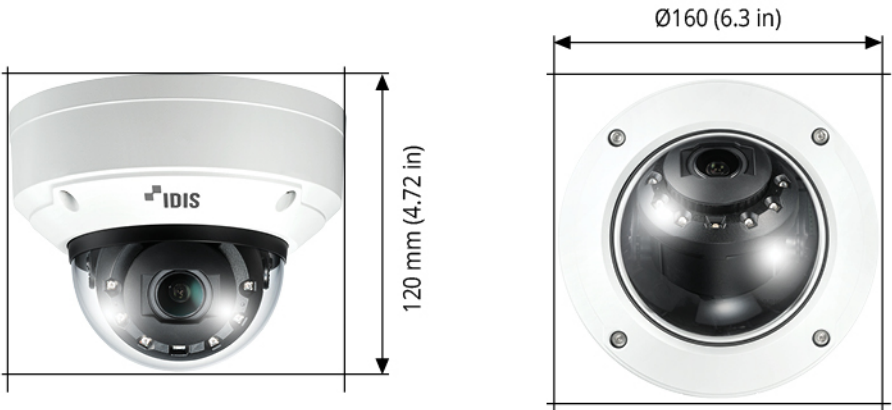
|                   |                                                          |
|-------------------|----------------------------------------------------------|
| Power Source      | 12VDC, PoE, IEEE 802.3af(Class 3)                        |
| Power Consumption | 12VDC, 1.1A, 13.2W PoE, IEEE 802.3af(Class3), 57VDC, 12W |
| Approval          | UL, FCC, CE, KC                                          |

MECHANICAL

|            |                             |
|------------|-----------------------------|
| Dimensions | Ø160 x 120mm(Ø6.3" x 4.72") |
| Weight     | 1.1kg (2.4lb)               |

DIMENSIONS

Unit - mm (inch)



DC-D6831WRA | Compatible Accessories

| ENVIRONMENT | CONFIGURATION                                                                                                                    |   |                                                                                                                                    |   |                                                                                                                                   |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------|
| Wall        | <div><p>MOUNT ADAPTER<br/>DA-MA2100</p></div>   | + | <div><p>WALL MOUNT<br/>DA-WM2050</p></div>       |   |                                                                                                                                   |
| Ceiling     | <div><p>MOUNT ADAPTER<br/>DA-MA2100</p></div>   | + | <div><p>CEILING MOUNT<br/>DA-CM2050</p></div>   |   |                                                                                                                                   |
|             | OR                                                                                                                               |   |                                                                                                                                    |   |                                                                                                                                   |
|             | <div><p>MOUNT ADAPTER<br/>DA-MA2100</p></div> | + | <div><p>Ceiling Mount<br/>DA-CM2100</p></div> |   |                                                                                                                                   |
| Pole        | <div><p>MOUNT ADAPTER<br/>DA-MA2100</p></div> | + | <div><p>WALL MOUNT<br/>DA-WM2050</p></div>      | + | <div><p>Pole Mount<br/>DA-LM2000</p></div>   |
| Corner      | <div><p>MOUNT ADAPTER<br/>DA-MA2100</p></div> | + | <div><p>WALL MOUNT<br/>DA-WM2050</p></div>      | + | <div><p>Corner Mount<br/>DA-RM2000</p></div> |

ENVIRONMENT

CONFIGURATION

Etc



**JUNCTION BOX**  
DA-JB2200

OR



**Dome Sun-shield**  
DA-SS1200