

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
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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

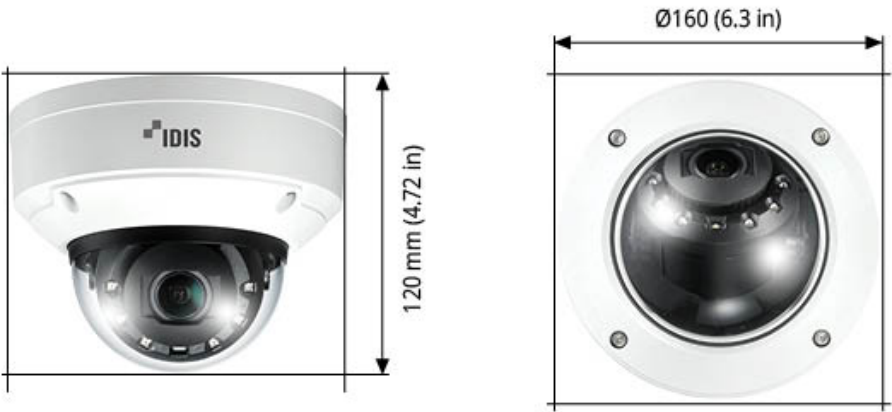
Vandal Proof Casing	IK10
Outdoor Ready	IP67, NEMA4X
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) *Starting up at above -20°C (-4°F)
Operating Humidity	0% ~ 90%

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

DC-D6831WRA | Compatible Accessories

ENVIRONMENT	CONFIGURATION				
Wall	 MOUNT ADAPTER DA-MA2100	+	 WALL MOUNT DA-WM2050		
Ceiling	 MOUNT ADAPTER DA-MA2100	+	 CEILING MOUNT DA-CM2050		
	OR				
	 MOUNT ADAPTER DA-MA2100	+	 Ceiling Mount DA-CM2100		
Pole	 MOUNT ADAPTER DA-MA2100	+	 WALL MOUNT DA-WM2050	+	 Pole Mount DA-LM2000
Corner	 MOUNT ADAPTER DA-MA2100	+	 WALL MOUNT DA-WM2050	+	 Corner Mount DA-RM2000

ENVIRONMENT

CONFIGURATION

Etc



JUNCTION BOX
DA-JB2200

OR



Dome Sun-shield
DA-SS1200