# **DUNLOP**

## DP-22DF8836IV-AELW **4K Smart IR PTZ Camera**















Dunlop 4K series DP-22DF8836IV-AELW smart PTZ dome cameras are able to capture high quality colored images in dim light environment with its cutting-edge low illumination level down to 0.02Lux (color). Embedded with 1/1.9" progressive scan CMOS chip makes WDR and 8MP real-time resolution possible. With the 36X optical zoom Day/Night lens, the camera offers more details over expansive areas.

The 4K series PTZ camera also features a wide range of smart functions, including face detection, intrusion detection, line crossing detection and audio exception, benefitting users with great improvement on security efficiency, more importantly, with key events / objects being recorded for further forensic needs. These features, combined with smart tracking, which enables the camera to detect any progressively moving object and follow it within the camera's area of coverage without fault. Smart Defog is further supported to improve image quality in challenging conditions.

#### **Key Features**

- 1/1.9" HD CMOS sensor
- 4K 8MP(4096x2160)
- 36X Optical Zoom
- **Smart Tracking**
- **Smart Detection**
- 200m IR distance
- Support wiper
- Hi-PoE / 24VAC power supply





### **Function Description**

#### **Basic function**

- High performance CMOS, up to 4096x2160 resolution
- ±0.1° Preset Accuracy
- ONVIF(Open Network Video Interface Forum), CGI(Common Gateway Interface), PSIA(Physical Security Interoperability Alliance), to ensure greater interoperability between different platforms and compatibility
- 3D intelligent positioning function
- 3D DNR
- IP66 standard
- 7 alarm inputs and 2 alarm outputs; 1 audio input and 1 audio output
- Support wiper

#### **Smart Function**

- Smart tracking modes: Manual/ Panorama/ Intrusion trigger/ Line crossing trigger/ Region entrance trigger/ Region
  exiting trigger, support smart tracking when patrol between multiple scenarios
- Smart detection: support Face detection, Intrusion detection, Line crossing detection, Audio exception detection, Region entrance detection, Region exiting detection.
- Smart recording: support edge recording, support dual-VCA for smart search in smart NVR
- Smart image processing: support optical defog, HLC, smart IR
- Smart codec: low bit rate, ROI

#### **Camera function**

- compensation and auto day & night switch
- Min. Illumination: 0.02Lux@(F1.5,AGC ON)(Color), 0.002Lux@(F1.5,AGC ON)(B/W), 0 Lux with IR
- Up to 200m IR distance; IR light MTBF reaching up to 30,000 hours
- Support privacy mask

#### PTZ functions

- 360° endless pan range and -20°~ 90° tilt range;
- 0.1°~ 160°/s Manual Pan Speed and 0.1°~ 120°/s Manual Tilt Speed
- 240°/s Pan Preset Speed and 200°/s Tilt Preset Speed
- 300 presets programmable; preset image freezing capability
- 8 patrols, up to 32 presets per patrol
- 4 patterns, with the recording time not less than 10 minutes per pattern
- Proportional zoom function
- Park action: auto call up of PTZ movement, after a defined time of inactivity
- Power-off memory: restore PTZ & Lens status after reboot.

#### **Network function**

- H.264/MJPEG video compression; H.264 encoding with Baseline/Main/High profile
- ROI(Region of Interest) encoding(support 24 areas with adjustable levels)
- Built-in Web server
- Onboard storage, up to 128GB
- Support up to 8 NAS storage; Edge recording(transmit the videos from SD card to the NAS after network resumed)
- HTTPS encryption and IEEE 802.1X port-based network access control
- Support trip-streams
- Multiple network protocols supported: IPv4/Ipv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE



## **Specifications**

Model	DP-22DF8836IV-AELW
Camera Module	
Image Sensor	1/1.9" Progressive Scan CMOS
Min. Illumination	F1.5, 50IRE, AGC On: Color: 0.02 lux, B/W: 0.002 lux, 0 lux with IR
Max. Image Resolution	4096x2160
Focal Length	5.7-205.2mm, 36x
Digital Zoom	16X
Zoom Speed	Approx.7.4s(Optical Wide-Tele)
Angle of View	56.8-2.02 degree (Wide-Tele)
Min. Working Distance	10-1500mm(Wide-Tele)
Aperture Range	F1.55~F4.8
Focus Mode	Auto / Semiautomatic / Manual
WDR	Support
Shutter Time	50Hz: 1~1/30,000s; 60Hz: 1~1/30,000s
AGC	Auto / Manual
White Balance	Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp
Day & Night	IR Cut Filter
Privacy Mask	24 privacy masks programmable
Optical Defog	Support
Enhancement	3D DNR, HLC/BLC, SVC
Pan and Tilt	
Range	Pan:360° endless; Tilt: -20°~90°(Auto Flip)
Speed	Pan Manual Speed: 0.1°~160°/s, Pan Preset Speed: 240°/s
	Tilt Manual Speed: 0.1°~120°/s, Tilt Preset Speed: 200°/s
Number of Preset	300
Patrol	8 patrols, up to 32 presets per patrol
Pattern	4 patterns, with the recording time not less than 10 minutes per pattern
Park Action	Preset / Patrol / Pattern / Auto scan / Tilt scan / Random scan / Frame scan / Panorama scan
Scheduled Task	Preset / Patrol / Pattern / Auto scan / Tilt scan / Random scan / Frame scan / Panorama
	scan/Dome reboot/Dome adjust/Aux output
Smart Features	
Smart tracking	Manual/ Panorama/ Intrusion trigger/ Line crossing trigger/ Region entrance trigger/ Region
	exiting trigger / Smart tracking when patrol between multiple scenarios
Smart detection	Face detection, Intrusion detection, Line crossing detection, Audio exception detection, Region
ROI encoding	entrance detection, Region exiting detection  Support 6 areas with adjustable levels
Infrared	Support o areas with adjustable levels
IR Distance	Up to 200m
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IR Intensity	Automatically adjusted, depending on the zoom ratio



Alarm	
Alarm I/O	7/2
Alarm Trigger	Face detection, Intrusion detection, Line crossing detection, Region entrance, Region exiting, Audio exception detection, Motion detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception
Alarm Action	Preset, Patrol, Pattern, Micro SD/SDHC card recording, Relay output, Notification on Client, Send Email, Upload to FTP, Trigger Channel
Input/Output	
Monitor Output	1.0V[p-p] / 75Ω, NTSC (or PAL) composite, BNC (S / N Ratio ≥ 55dB)
Audio Input	1 Mic in/Line in interface, line input: 2-2.4V[p-p]; output impedance: 1KΩ, ±10%
Audio Output	1 Audio output interface, line level, impedance: $600\Omega$
Network	
Ethernet	10Base-T / 100Base-TX, RJ45 connector
Main Stream	50Hz:25fps(4096×2160, 3840×2160, 3072×1728, 2560×1440, 1920×1080, 1280×720) 60Hz:24fps(4096×2160), 30fps(3840×2160, 3072×1728, 2560×1440, 1920×1080, 1280×720)
Sub Stream	50Hz: 25fps(704×576, 640×480, 352×288); 60Hz: 30fps(704×480, 640×480, 352×240)
Third Stream	50Hz: 25fps(704×576, 640×480, 352×288); 60Hz: 30fps(704×480, 640×480, 352×240)
Image Compression	H.264/MJPEG, H.264 encoding with Baseline/Main/High profile
Audio Compression	G.711ulaw/G.711alaw/G.726/MP2L2/G.722/PCM
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Simultaneous Live View	Up to 20 users
Mini SD Memory Card	Support up to 128GB Micro SD/SDHC/SDXC card. Support Edge recording
User/Host Level	Up to 32 users,3 Levels: Administrator, Operator and User
Security Measures	User authentication (ID and PW); Host authentication (MAC address); IP address filtering
System Integration	
Application programming	Open-ended API, support ONVIF, PSIA, CGI and Genetec
Web Browser	IE 7+, Chrome 18 +, Firefox 5.0 +, Safari 5.02 +, support multi-language
RS-485 Protocols	DUNLOP , Pelco-P, Pelco-D, self-adaptive
Power	High-PoE&24 VAC, Max.60W
Working Temperature	-40°C ~ 65°C (-40°F ~ 149°F)
Humidity	90% or less
Protection Level	IP66, IK10, TVS 6,000V lightning protection, surge protection and voltage transient protection
Certification	FCC, CE, UL, RoHS, IEC/EN 61000, IEC/EN 55022, IEC/EN 55024, IEC /EN60950-1
Dimensions	Ф266.6(mm)×435(mm)
Weight (approx.)	8kg (approx.)
Mount Option	Long-arm wall mount: DS-1602ZJ; Corner mount: DS-1602ZJ-corner;  Pole Mount: DS-1602ZJ-pole; Power box mount: DS-1602ZJ-box; Swan-neck mount: DS-1619ZJ