

# DP-22CD4028FWD-(A)(P) 2MP Low Light Smart Camera



DP-22CD4028FWD-(A)(P)is Smart IPC and features complete Smart functions including:

**Smart Detection** 

Intrusion Detection, Line Crossing Detection, Object Left/Removal, Area Entering/Leaving, Scene Change Detection, Audio Surge Detection, Audio Loss Detection, Defocus Detection, Face Detection, Object Counting, etc.

#### **Smart Codec**

Smart Recording with dual-VCA, Low Bitrate, Low Latency, ROI enhancement, Multi-stream, Rotate Mode, Edge Recording, etc.

Smart Image Control
Smart Auto Focus with ABF (-A)

The Eagle Eye series ultra-low light Smart cameras are able to capture high quality colored images in dim light environment. DP-22CD4028FWD-(A)(P) offers Full HD resolution with up to 60fps high frame rate, 120dB WDR, Auto Back Focus, P-Iris, PoE, Defog, 3D DNR and complete Smart Feature-set to meet a wide variety of applications.

- 1/2" Progressive Scan CMOS
- Full HD1080p video
- Up to 60fps frame rate
- Ultra-low light
- Slow shutter
- 120dB WDR
- 3D DNR
- -A: Auto Back Focus
- -P: P-Iris
- Audio/Alarm IO
- Support 128G on-board storage
- DC12V/AC24V/PoE





# Specification

Camera		
Image Sensor	1/2" Progressive Scan CMOS	
Min. Illumination	Color: 0.006 Lux @ (F1.2, AGC ON), B/W: 0.0006 Lux @ (F1.2, AGC ON)	
Shutter Speed	1s ~ 1/110,000s	
Slow Shutter	Support	
Lens Mount	C/CS mount	
Auto-iris	DC drive(-P: support P-Iris)	
Day & Night	IR Cut Filter	
WDR	120dB	
Focus	-A: support ABF	
Compression Standard		
Video Compression	H.264+/H.264/MPEG4/MJPEG	
H.264 Type	Baseline Profile / Main Profile / High Profile	
Video Bit Rate	32 Kbps – 16 Mbps	
Audio Compression	G.711/G.722.1/G.726/MP2L2	
Audio Bit Rate	64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32-128Kbps(MP2L2)	
Image		
Max. Resolution	1920 × 1080	
Frame Rate	50Hz: 50fps(1920 × 1080, 1280 × 960, 1280 × 720) 60Hz: 60fps (1920 × 1080, 1280 × 960, 1280 × 720)	
Third Stream	Independent with Main Stream and Sub Stream, up to 50Hz: 25fps(1920 × 1080); 60Hz: 30fps (1920 × 1080)	
Image Enhancement	BLC/3D DNR/ROI/Defog/EIS	
Image Setting	Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser	
Regional Cropping	Support	
Day/Night Switch	Auto/Schedule/Triggered by Alarm In	
Picture Overlay	LOGO picture can be overlaid on video with 128x128 24bit bmp format	
Network		
Network Storage	NAS (Support NFS,SMB/CIFS), ANR	
Alarm Trigger	Motion detection, Tampering alarm, Network disconnect, IP address conflict, Storage exception	
Protocols	TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour	
Security	User Authentication, Watermark, IP address filtering, Anonymous access	
Standard	ONVIF(PROFILE S,PROFILE G),PSIA,CGI,ISAPI	
Interface		
Audio	1-ch 3.5 mm audio in( Mic in/Line in)/out interface, 1 build-in Microphone	
Communication Interface	1 RJ45 10M/100M Ethernet port, 1 RS-485 interface and 1 RS-232 interface	
Alarm	1 input, 1 output (up to DC24V 1A or AC110V 500mA)	
Video Output	1Vp-p composite output (75 Ω/BNC)	
On-board storage	Built-in Micro SD/SDHC/SDXC slot, up to 128 GB	
Reset Button	Yes	



Audio		
Environment Noise Filtering	Support	
Audio I/O	Support dual audio track, stereo	
Audio Sampling Rate	16kHz / 32kHz / 44.1kHz / 48kHz	
Smart Feature-set		
Behavior Analysis	Line crossing detection, Intrusion detection, Region entrance, Region exiting, Unattended baggage, Object removal	
Line Crossing Detection	Cross a pre-defined virtual line	
Intrusion Detection	Enter and loiter in a pre-defined virtual region	
Region Entrance	Enter a pre-defined virtual region from the outside place	
Region Exiting	Exit from a pre-defined virtual region	
Unattended Baggage	Objects left over in the pre-defined region such as the baggage, purse, dangerous materials	
Object Removal	Objects removed from the pre-defined region, such as the exhibits on display.	
Exception Detections	Scene change detection, Sudden audio increase/decrease detection, Audio loss detection, Defocus detection	
Recognition	Face detection recognition	
Statistics	Object Counting (Entrance and Exit object number is accounted and showed on screen in real time)	
General		
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F), Humidity 95% or less (non-condensing)	
Power Supply	24 V AC ± 10%, 12 V DC ± 10%, PoE (802.3af)	
Power Consumption	Max. 6 W (Max. 9W with IR cut filter on)	
Dimensions	69.8×58×145 mm (2.75" × 2.28" × 5.71")	
Weight	830 g (1.83 lbs)	



# **Smart**

- 6 behavior analysis, 4 exception detections, 1 recognition, 1 statistic function.
- Smart recording: Support edge recording and dual-VCA.
- Smart encoding: Support low bit rate; low latency; ROI enhance encoding
- Smart lens options: ABF (-A), P-iris(-P).

# **Image**

- HD 1920 × 1080@60fps
- Support rotate mode, suitable for environment as corridor.
- Support regional cropping, details can be seen with low bandwidth.
- Code smoothness setting for different requirements of image quality and fluency.
- Support H.264+/H.264/MJPEG/MPEG4 video compression, multi-level video quality configuration; support
- Basic/Main/High Profile H.264 encoding complexity.
- Multiple OSD color: Black & white self-adaptive; Custom
- 120dB WDR is supportable for backlight environment.
- Support defog, BLC, EIS.

### System

- Support ONVIF (profile S/profile G), CGI, PSIA, ISAPI protocol.
- Support three streams, and Support 20 channels live view at the same time.
- Anti-thunder, anti-surge, anti-static protection level.

#### Interface

- Support standard 128G Micro SD/SDHC/SDXC card storage.
- Support 10M/100M Ethernet Port.
- Support Audio I/O, support dual channel stereo audio.
- Support Alarm I/O
- Support CVBS analog output (4CIF resolution)

## Security

- Support three-level user authentication management, user and password authorization, IP address filtering and anonymous access.
- Support security certificate as HTTPS, SSH; support creating certificate.
- Basic and digest authentication is supportable in IE configuration
- Lock user IP for many times error login