

## DP-22CD4AC5F-IZS 4K Smart Bullet Camera



The 4K series Smart cameras are able to capture super high quality images.

DP-22CD4AC5F-IZS offers 12MP HD resolution with up to 15fps frame rate, DWDR, PoE, Defog, 3D DNR and complete Smart Feature-set to meet a wide variety of applications.

DP-22CD4AC5F-IZS 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

Support distortion correction

- 1/1.7" Progressive Scan CMOS
- 4000 × 3000 @15fps frame rate
- Slow shutter
- DWDR
- 3D DNR
- Up to 50m IR range
- Motorized lens with Smart Focus
- -S: audio/alarm IO
- Support 128G on-board storage
- DC12V/PoE
- IP67



## 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: AF lens

## Image

- HD 4000 × 3000@15fps
- Supports image distortion correction
- 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 video compression, multi-level video quality configuration; support
- Basic/Main/High Profile H.264 encoding complexity.
- Multiple OSD color: Black & white self-adaptive; Custom
- Digital WDR is supportable for backlight environment.
- Support defog, BLC, HLC.

## Infrared

- Irradiation distance is up to 50m
- IR anti-reflection panel, increase infrared light transmittance.
- Smart IR, prevent over-exposure in close distance

## System

- Support ONVIF (profile S/profile G), CGI, PSIA, ISAPI protocol.
- Support three streams, and Support 20 channels live view at the same time.
- AF automatic fast focus, maintain focused during zooming
- Anti-thunder, anti-surge, anti-static, IP67 protection level.

## Interface

- Support standard 128G Micro SD/SDHC/SDXC card storage.
- Support 10M/100M/1000M Ethernet Port.
- Support Audio I/O (-S), support dual channel stereo audio.
- Support Alarm I/O (-S)
- Support CVBS analog output (-S, 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

## Specification

| Camera                  |                                                                                                                                                                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor            | 1/1.7" Progressive Scan CMOS                                                                                                                                                                                                                             |
| Min. Illumination       | 0.01 Lux @ (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR                                                                                                                                                                                     |
| Shutter Speed           | 1s ~ 1/100,000s                                                                                                                                                                                                                                          |
| Slow Shutter            | Support                                                                                                                                                                                                                                                  |
| Lens                    | 2.8~12mm @ F1.4, angle of view, 93.6°~31.8°                                                                                                                                                                                                              |
| Lens Mount              | AF automatic focusing and motorized zoom lens                                                                                                                                                                                                            |
| Auto-iris               | DC drive                                                                                                                                                                                                                                                 |
| Day & Night             | IR Cut Filter with auto switch                                                                                                                                                                                                                           |
| WDR                     | DWDR                                                                                                                                                                                                                                                     |
| Compression Standard    |                                                                                                                                                                                                                                                          |
| Video Compression       | H.264+/H.264/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         | 4000 × 3000                                                                                                                                                                                                                                              |
| Frame Rate              | 50Hz: 15fps (4000 × 3000), 22fps (4096 × 2160), 25fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720)<br>60Hz: 15fps (4000 × 3000), 22fps (4096 × 2160), 24fps (3840 × 2160), 30fps (3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) |
| Third Stream            | Independent with Main Stream and Sub Stream, up to 50/60Hz: 10fps(1280 × 720)                                                                                                                                                                            |
| Image Enhancement       | BLC/3D DNR/ROI/Defog                                                                                                                                                                                                                                     |
| Image Setting           | Rotate Mode, Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser                                                                                                                                                    |
| Regional Cropping       | Support                                                                                                                                                                                                                                                  |
| Distortion Correction   | 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 (-S)              | 1-ch 3.5 mm audio in(Mic in/Line in)/out interface                                                                                                                                                                                                       |
| Communication Interface | 1 RJ45 10M/100M/1000M Ethernet port                                                                                                                                                                                                                      |
| Alarm (-S)              | 1 input, 1 output (up to DC24V 1A or AC110V 500mA)                                                                                                                                                                                                       |
| Video Output (-S)       | 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 (-S)                  |                                                                                                                   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------|
| 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                     |                                                                                                                   |
| Protection Level            | IP67                                                                                                              |
| Operating Conditions        | -30°C – 60 °C (-22 °F – 140 °F), Humidity 95% or less (non-condensing)                                            |
| Power Supply                | 12 V DC ± 10%, PoE (802.3at)                                                                                      |
| IR Distance                 | Up to 50m                                                                                                         |
| Power Consumption           | Max. 12 W                                                                                                         |
| Dimensions                  | 100×103.9×311.8 mm (3.94" × 4.09" × 12.28")                                                                       |
| Weight                      | 2000 g (4.41 lbs)                                                                                                 |