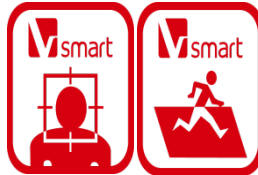# HNCA12-FEA
# 12MP Network Fisheye Camera

**HNCA12-FEA is a fisheye network camera capable of providing a 360 degree panoramic image of its surveillance scene.**

**The progressive scan CMOS sensor provides high-resolution images of up to 4000 x 3072.**

**Up to 14 live view display modes, specifically designed for 3 mount types and 2 decoding modes, meet the major needs from customers of different preference.**

**IR range of 15 meters provides good visibility in low or even zero-light environment.**

- 1/1.7" Progressive Scan CMOS
- Max. 4000 x 3072 @20fps
- Up to 14 live view display modes
- Digital WDR
- Up to 15m IR range
- Built-in microphone and speaker
- 2 behavior analysis, 1 statistic
- With – V model: IK10 for camera housing, IP66

## 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 3072 × 2048@24fps
- 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.

## 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-surge, anti-static protection level.

## Interface

- Support standard 128G Micro SD/SDHC/SDXC card storage.
- Support 10M/100M/1000M 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

# Specification

| Camera | |
|---|---|
| Image Sensor | 1/1.7'' Progressive Scan CMOS |
| Min. Illumination | 0.01 Lux @ (F1.2, AGC ON), 0.04 Lux @ (F2.4, AGC ON), 0 Lux with IR |
| Shutter Speed | 1/3 s – 1/100,000 s |
| Slow Shutter | Support |
| Lens | 2 mm @F2.4, horizontal field of view: 180°(wall mount), 360°(ceiling mount), 360°(table mount) |
| Lens Mount | M12 |
| Auto-iris | N/A |
| Day & Night | IR cut filter |
| Digital Noise Reduction | 3D DNR |
| WDR | Digital WDR |
| **Compression** | |
| Video Compression | Main stream: H.264 Sub stream: H.264/MJPEG |
| H.264 Type | Baseline Profile / Main Profile / High Profile |
| H.264+ | Support only when the display mode is Fisheye View |
| Video Bit Rate | 256 Kbps – 16 Mbps |
| Audio Compression | G.711/G.722.1/G.726/MP2L2/PCM |
| Audio Bit Rate | 64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32-160Kbps(MP2L2) |
| **Image** | |
| Max. Resolution | 4000 × 3072 |
| Frame Rate | 50Hz: 20fps (4000 × 3072), 25fps(3072 × 3072, 2560 × 2560) 60Hz: 20fps (4000 × 3072), 24fps(3072 × 3072), 30fps(2560 × 2560) |
| Third Stream | 50Hz: 12.5fps (720 × 720, 704 × 576) 60Hz: 15fps (720 × 720, 704 × 480) |
| Image Enhancement | BLC/3D DNR |
| Image Setting | Saturation, Brightness, Contrast, Sharpness adjustable by client software or web browser |
| Regional | Support 3 fixed region for each stream |
| Day/Night Switch | Auto/Schedule/Triggered by Alarm In (with – S model) |
| Picture Overlay | LOGO picture can be overlaid on video with 128x128 24bit bmp format |
| **Live View Display** | |
| Mount Type | Support table, wall, and ceiling |
| Decoding Mode | Support hardware decoding and software decoding |
| Display Mode | Support 15 display modes in total (including display modes of different mount types and decoding modes): Fisheye View, 180 Panorama View, 4PTZ, Fisheye + 3PTZ, Fisheye + Panorama + 3PTZ, 360 Panorama View, 360 Panorama + PTZ, 360 Panorama + 3PTZ, 360 Panorama + 6PTZ, 360 Panorama + 8PTZ, 2PTZ, Fisheye + 8PTZ, Panorama View, Panorama + 3PTZ, Panorama + 8PTZ |
| **Network** | |
| Network Storage | Support microSD/SDHC/SDXC card (128G), local storage and NAS (NFS,SMB/CIFS), ANR |
| Alarm Trigger | Motion detection, video tampering alarm, network disconnected, IP address conflicted, illegal login, HDD full, HDD error |
| 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 | One-key reset, anti-flicker, heartbeat, password protection, privacy mask, watermark, IP address filter |
| Standard | ONVIF(PROFILE S,PROFILE G), ISAPI |
| **Interface** | |
| Audio Input | 1 3.5mm audio interface, Mic in/Line in (with – S model); 1 built-in microphone by default, -42dB |
| Communication Interface | 1 RJ45 10M/100M Ethernet port With –S model: 1 RS-485 interface |
| Alarm (With –S model) | 1 input, 1 output (up to DC24V 1A or AC110V 500mA ) |
| Alarm Output | 1 3.5mm audio output interface (with – S model); 1 built-in speaker by default, support echo cancellation |
| 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 |
| Audio Sampling Rate | Max 48kHz |

| Smart Feature-set | |
|---|---|
| Line Crossing Detection | Cross a pre-defined virtual line, up to 4 pre-defined virtual lines supported |
| Intrusion Detection | Enter and loiter in a pre-defined virtual region, up to 4 pre-defined virtual regions supported |
| Heat Map | A graphical representation of density of visit in a configured area. |
| 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 | Indoor temperature: -10 °C – 50 °C (14 °F – 122 °F) With –V model: Outdoor temperature: -30 °C – 60 °C (-22 °F – 140 °F) Humidity 95% or less (non-condensing) |
| Power Supply | DC 12 V ± 10%, 0.94 A PoE (802.3at, class 4), 0.41 – 0.26 A |
| Power Consumption | Max. 14.7 W |
| IR Range | 15 m |
| Protection Level | With – V model: IEC60068-2-75Eh, 20J; EN50102, up to IK10 for camera housing With – V model: IP66 |
| Dimensions | 164 × 152.8 × 43.8 mm (6.46" × 6.02" × 1.72") With –V model: 164 × 152.8 × 49.5 mm (6.46" × 6.02" × 1.95") |
| Weight | 1400 g (3.09 lbs) |