# DH-SD60230U-HNI

## 2MP 30x Starlight PTZ Network Camera

- 1/2.8" 2Megapixel Exmor R CMOS
- Powerful 30x optical zoom
- Starlight technology
- H.265 Encoding
- Max. 50/60fps@1080P, 25/30/50/60fps@720P
- Auto-tracking and IVS(Optional)
- Support PoE+
- IP67, IK10

H.265 | WDR | 0.005Lux | ICR D/N | IP67 | Vandal-proof | PoE+

## System Overview

Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD60 series PTZ camera can provide large monitoring range and great detail. The camera delivers 1080P resolution at 50/60 fps, with 30x optical zoom, and has very excellent low light performance due to adopting the latest starlight technology. SD60 series PTZ is equipped with quick and smooth control, high quality image and good protection, which make it can meet most of the requirements of video surveillance applications.

## Functions

Starlight Technology
Thanks to our experience and expertise in hardware and software development , the camera is equipped with the latest image processing algorithm, high performance hardware and high quality optical components, which make the camera have very exellent low light performance. In most conditions, this camera can deliver clear, bright and low-noise color images.

Wide Dynamic Range
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, true WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking
The camera supports auto-tracking. The tracking action can be triggered manually or automatically by defined rules. Once rules are triggered, the camera can zoom in and track the defined target automatically.

H.265
The camera supports H.265 encoding, which provides a savings of more than 50% of bandwidth and storage compared with H.264. This technology can help our customers to reduce the cost of the project and improve the transmission efficiency.

Environmental
With a temperature range of -40 °C to +70 °C (-40 °F to +158 °F), the camera is designed for extreme temperature environments. The camera complies to an IK10 impact rating making it capable of withstanding the equivalent of 55 kg (120 lbs) of force. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications.

Protection
This camera suits even the harsh conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Interoperability
The camera conforms to the ONVIF (Open Network Video Interface Forum) and PSIA (Physical Security Interoperability Alliance) specifications, ensuring interoperability between network video products regardless of manufacturer.

ONVIF PSIA

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/2.8" Exmor R CMOS |
| Effective Pixels | 1920(H) x 1080(V), 2 Megapixels |
| RAM/ROM | 512M/128M |
| Scanning System | Progressive |
| Minimum Illumination | Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6 |
| S/N Ratio | More than 55dB |
| IR Distance | N/A |
| IR On/Off Control | N/A |
| IR LEDs | N/A |

### Lens

| | |
|---|---|
| Focal Length | 4.5mm~135mm |
| Max. Aperture | F1.6 ~ F4.4 |
| Angle of View | H: 67.8° ~ 2.4° |
| Optical Zoom | 30x |
| Focus Control | Auto/Manual |
| Close Focus Distance | 100mm~ 1000mm |

### PTZ

| | |
|---|---|
| Pan/Tilt Range | Pan: 0° ~ 360° endless; Tilt: -20° ~ 90°,auto flip 180° |
| Manual Control Speed | Pan: 0.1° ~300° /s; Tilt: 0.1° ~150° /s |
| Preset Speed | Pan: 600° /s; Tilt: 500° /s |
| Presets | 300 |
| PTZ Mode | 5 Pattern, 8 Tour, Auto Pan ,Auto Scan |
| Speed Setup | Human-oriented focal Length/ speed adaptation |
| Power up Action | Auto restore to previous PTZ and lens status after power failure |
| Idle Motion | Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period |
| Protocol | DH-SD, Pelco-P/D (Auto recognition) |

### Intelligence

| | |
|---|---|
| Auto Tracking | Support |
| IVS (optional) | Tripwire, Intrusion,Abandoned/Missing, Face Detection |

### Video

| | | |
|---|---|---|
| Compression | H.265/H.264 / MJPEG | |
| Streaming Capability | 3 Streams | |
| Resolution | 1080P(1920×1080)/1.3M(1280×960)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240) | |
| Frame Rate | Main stream | 1080P/720P(1 ~ 50/60fps), 1.3M(1 ~ 25/30fps) |
| | Sub stream1 | D1/CIF(1 ~ 25/30fps) |
| | Sub stream2 | 1080P/1.3M/720P/D1/CIF (1 ~ 25/30fps) |

| | |
|---|---|
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.265/H.264: 448K ~ 8192Kbps, MJPEG: 5120K ~ 10240Kbps |
| Day/Night | Auto(ICR) / Color / B/W |
| Backlight Compensation | BLC / HLC / WDR (120dB) |
| White Balance | Auto,ATW,Indoor,Outdoor,Manual |
| Gain Control | Auto / Manual |
| Noise Reduction | Ultra DNR (2D/3D) |
| Motion Detetion | Support |
| Region of Interest | Support |
| Electronic Image Stabilization (EIS) | Support |
| Defog | Support |
| Digital Zoom | 16x |
| Flip | 180° |
| Privacy Masking | Up to 24 areas |

### Audio

| | |
|---|---|
| Compression | G.711a/G.711Mu/AAC/G.722 / G.726/G.729/ MPEG2-L2 |

### Network

| | |
|---|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | IPv4/IPv6,HTTP,HTTPS,SSL,TCP/IP, UDP,UPnP, ICMP,IGMP,SNMP,RTSP,RTP, SMTP, NTP,DHCP, DNS,PPPOE,DDNS,FTP, IP Filter,QoS,Bonjour,802.1x |
| Interoperability | ONVIF, PSIA, CGI |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 20 users |
| Edge Storage | NAS (Network Attached Storage),Local PC for instant recording, 128GB |
| Web Viewer | IE10/Google/Firefox/Safari... |
| Management Software | Smart PSS, DSS |
| Smart Phone | iPhone, iPad, Android, Windows Phone |

### Certifications

| | |
|---|---|
| Certifications | CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB,ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2,No.60950-1 |

### Interface

| | |
|---|---|
| Video Interface | 1 |
| Audio Interface | 1/1 |
| RS485 | 1 |
| Alarm | 7/2 |

### Electrical

| | |
|---|---|
| Power Supply | AC24V/3A(±25%), PoE+(802.3at) |
| Power Consumption | 13W,20W (Heater on) |

Environmental

| Operating Conditions | -40ºC ~ 70ºC (-40°F ~ +158°F) / Less than 90% RH |
|---|---|
| Ingress Protection | IP67 |
| Vandal Resistance | IK10 |

Construction

| Casing | Metal |
|---|---|
| Dimensions | Φ222(mm) x 297(mm) |
| Net Weight | 6.2kg(13.67lb) |
| Gross Weight | 7.5kg(16.53lb) |

## Ordering Information

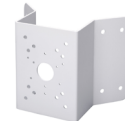| Type | Part Number | Description |
|---|---|---|
| 2MP PTZ Camera | DH-SD60230U-HNI | 2MP 30x Starlight PTZ Network Camera, WDR, PAL |
| | DH-SD60230UN-HNI | 2MP 30x Starlight PTZ Network Camera, WDR, NTSC |
| | SD60230U-HNI | 2MP 30x Starlight PTZ Network Camera, WDR, PAL |
| | SD60230UN-HNI | 2MP 30x Starlight PTZ Network Camera, WDR, NTSC |
| Accessories | PFB303W | Wall Mount |
| | PFA111 | Mount Adapter |
| | AC24V/3A | Power Supply |
| | PFA140 | Power box |
| | PFB300C | Ceiling Mount |
| | PFA120 | Junction Box |
| | PFA150 | Pole Mount |
| | PFA151 | Corner Mount |
| | PFB303S | Parapet mount |

## Accessories

Included:



PFB303W
Wall Mount



PFA111
Mount Adapter



AC24V/3A
Power Supply

Optional：



PFA140
Power box



PFB300C
Ceiling Mount



PFA120
Junction Box



PFA150
Pole Mount



PFA151
Corner Mount



PFB303S
Parapet Mount

| Ceiling Mount | Junction Mount |
|---|---|
| PFA110 + PFB300C | PFA110 + PFB300S + PFA120 |
|  |  |
| **Power Box Mount** | **Pole Mount** |
| PFA110 + PFB300S + PFA140 | PFA110 + PFB300S + PFA150 |
|  |  |
| **Corner Mount** | **Parapet Mount** |
| PFA110 + PFB300S + PFA151 | PFA110 + PFB303S |
|  |  |

## Dimensions (mm)

⌀47mm

297mm

⌀157mm

⌀222mm

DAHUA
TECHNOLOGY