



Features

Excellent Image Quality

- 2.0 Megapixel 1/2.8" progressive scan CMOS Sensor
- High definition and smooth picture, 1080p@30fps
- H.265 high profile video codec, saves up to 50% bandwidth and storage
- Ultra low illumination, 0.003lux with color picture
- 120dB Ultr WDR

Intelligent Functions

- Motion detection / Tampering / Guard line / Enter guard area / Exit guard area / Object left / Object removal / Gathering / Audio surge

Long Operational Lifespan

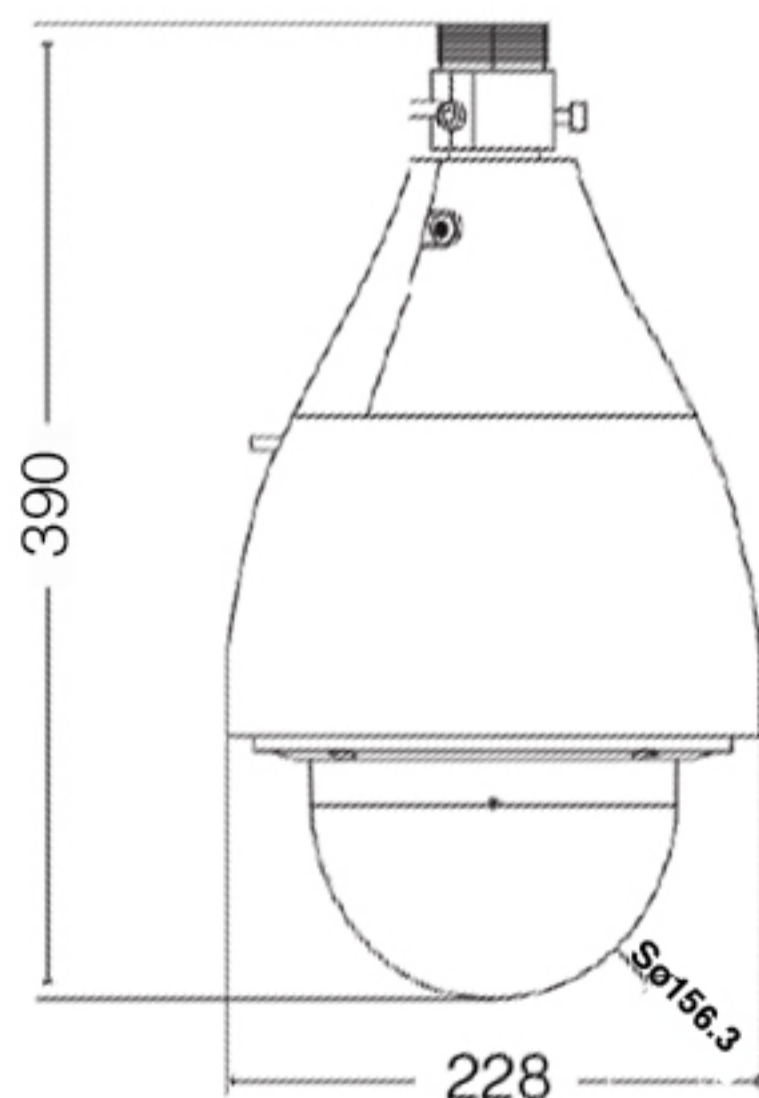
- Industrial components, operating temperature of -40°C ~ 70°C
- IP67, TVS 6000V lightning protection, surge protection and voltage transient protection

Abundant Functions and Features

- SD card slot, supports Automatic Network Replenishment (ANR)
- Up to 3 video streams
- Bi-directional audio / alarm in and out / video out / RS485
- Built-in O-sensor

Dimensions

Units: mm



Specifications

| Model | IPC421-F233 |
|---------------------------------------|---|
| Camera | |
| Image Sensor | 1/2.8" Progressive Scan CMOS |
| Pixels | 2.0 Megapixel |
| Min. Illumination | Color: 0.003lux @ (F1.6, AGC ON) B/W: 0.0003lux @ (F1.6, AGC ON) |
| Shutter Speed | 1 ~ 1/30,000s |
| Day / Night | Auto (ICR) / Color / B/W |
| Wide Dynamic Range | Ultra WDR, 120dB |
| S/N Ratio | >55dB |
| White Balance | Auto / Manual |
| Gain Control | Auto / Manual |
| Backlight Compensation | Off / WDR / BLC / HLC |
| Lens | |
| Focal Length | 4.5 ~ 148.5mm, 33x optical |
| Zoom Speed | Approx. 3s (Optical) |
| Angle of View | 67.8°~2.34° (Wide~Tele) |
| Minimum Object Distance | 300 ~ 1500mm (Wide~Tele) |
| Max. Aperture Ratio | F1.6 (Wide) / F4.4 (Tele) |
| Focus Control | Auto / Manual / Semi-Automatic |
| Pan and Tilt | |
| Pan / Tilt Range | 360° Endless / 0° ~ 90° |
| Pan / Tilt Speed | Pan manual speed: 0.1° ~ 250°/s; Pan preset speed: 450°/s Tilt manual speed: 0.1° ~ 150°/s; Tilt preset speed: 350°/s |
| Proportional Zoom | Pan / Tilt speed can be adjusted automatically according to zoom multiples |
| Preset | 256 |
| Patrol | 8 Patrols scheme, up to 32 presets per patrol |
| Pattern Scan | 4 Scan paths, each path can record 10 minutes of operation path |
| Power-off Memory | Power-off memory / Power-on recovery |
| Auto Guard | Path / Preset / Mixed / Pan scan / Tilt scan / Frame scan / Random scan / Panorama scan |
| PT Limit | Manual / Scan / Pan |
| 3D Positioning | PTZ control with mouse click and drag |
| Electronic compass | Built-in O-sensor |
| Video | |
| Compression | H.265 / H.264 / MJPEG |
| Image Resolution | Main stream: 1080p Secondary stream: D1 |
| Frame Rate | Main stream: 1080p@30fps Secondary stream: D1@30fps |
| Bitrate | 32kbps ~ 16Mbps |
| Bitrate Control | VBR / CBR |
| Multi-stream | Supported |
| Caption | Date and time / Alarm / Direction / Customized |
| Privacy Masking | Up to 4 zones |
| Motion Detection | Up to 4 zones |
| Video Freeze | Supported |
| ROI | Supported |
| Digital Noise Reduction | 3D noise reduction |
| Digital Defog | Supported |
| Image Flip | Flip / Mirror |
| Audio | |
| Compression | G.711a / G.711u / ADPCM / G.722 / AAC-LC / G.722.1c / G.726 |
| Bitrate | 32kbps ~ 64kbps |
| Audio Function | Bi-directional audio / AEC / Mixed audio recording / Dumb / Mute |
| Network | |
| Network Protocols Supported | TCP/IP, UDP, HTTP, DHCP, DNS/DDNS, RTP/RTCP, RTSP, PPPoE, FTP, VSIP, UPnP, 802.1x, NAT, QoS, SMTP, IPv4, IPv6 (optional) |
| User Interface | IPC Control (IE, Firefox, Chrome) |
| Max. User Access | 10 Users (includes 2 internal access) |
| Application Programming | ONVIF (Profile S, Profile G), GB/T 28181-2011, API, CGI |
| Automatic Network Replenishment (ANR) | Supported |
| Alarm | |
| Alarm Triggers | Alarm input / Network disconnect / Disk full / Disk error |
| Intelligent | Motion detection / Tampering / Guard line / Enter guard area / Exit guard area / Object left / Object removal / Gathering / Audio surge |
| Alarm Events | Alarm report / Recording / Text overlay / Snapshot / External output / Email notice / Acoustic alarm |
| Interfaces | |
| Ethernet | 10/100M, RJ45 interface |
| Audio In / Out | 1 x Line in / 1 x Line out |
| Control | 1 x RS485 |
| Alarm In / Out | 4 x Input / 2 x Output |
| Video Out | 1 x BNC, 1.0V [p-p] / 75Ω |
| Memory Slot | SD card slot, supports up to 128GB |
| Environmental | |
| Operating Temperature | -40°C ~ 70°C / -40°F ~ 158°F |
| Operating Humidity | 10% ~ 95% |
| Protection Level | IP67, TVS 6000V lightning protection, surge protection and voltage transient protection |
| Electrical | |
| Power | 24V AC / 3A (Power adapter included) |
| Power Consumption | Max. 45W (Heater on) |
| Mechanical | |
| Weight | 6kg / 13.2lb (Net Weight) |
| Dimensions | Φ228 x 390mm / Φ8.98" x 15.35" |