

# IPC421-F233-N1

## 2.0MP Starlight & Ultra WDR HD 33x Network Speed Dome Camera



### Features

#### Excellent Image Quality

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

#### Intelligent Functions

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

#### Long Operation Lifespan

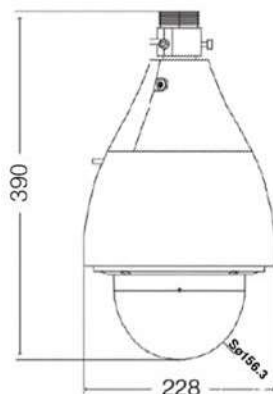
- Industrial components, withstands operation temperatures of -40°C ~ 70°C
- IP67, TVS 6000V lightning protection, surge protection and voltage transient protection

#### 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

IPC421-F233-N1	
<b>Camera</b>	
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
<b>Lens</b>	
Focal Length	4.5 ~ 148.5mm, 33x optical
Zoom Speed	Approx 3s (Optical)
Angle of View	67.8° ~ 2.34° (Wide~Tele)
Min. Object Distance	300 ~ 1500mm (Wide~Tele)
Max. Aperture Ratio	F1.6 (Wide) / F4.4 (Tele)
Focus Control	Auto / Manual / Semi-Automatic
<b>Pan and Tilt</b>	
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
<b>Video</b>	
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	IPC421-F233-N1
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
<b>Audio</b>	
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
<b>Network</b>	
Network Protocols	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	Max. 10 Users (includes 2 internal)
Application Programming	ONVIF (Profile S, Profile G), GB/T 28181-2011, API, CGI
Automatic Network Replenishment (ANR)	Supported
<b>Alarm</b>	
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
<b>Interfaces</b>	
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
<b>Environmental</b>	
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
<b>Electrical</b>	
Power	24V AC / 3A (Power adapter included)
Power Consumption	Max. 45W (Heater on)
<b>Mechanical</b>	
Weight	6 kg / 13.2lb (Net Weight)
Dimensions	Φ228 x 390mm / Φ8.98" x 15.35"