

# IPC523-F255-NR-TU

## 2.0MP HD 55x Optical & Thermal Bi-spectrum PTZ Camera



### Features

#### Excellent Image Quality

- Vanadium oxide uncooled focal plane arrays Thermal Sensor
- 2.0 Megapixel 1/1.8" Progressive Scan CMOS Sensor
- High definition and smooth picture, 1080p@60fps (Optical)
- H.265 video codec, saves up to 50% bandwidth and storage
- Ultra low illumination, 0.001Lux with color picture
- 120dB Ultra WDR
- Laser automatically adjusts
- HLC / 3D noise reduction

#### Thermal Module

- High sensitivity thermal module, 800 x 600@30fps (IPC523-F255-NR150)
- Up to 9 palettes of adjustable color

#### Intelligent Functions

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

#### Long Operation Lifespan

- Industrial components, withstands operation temperatures of -40°C ~ 70°C
- IP66, TVS 6000V lightning protection, surge protection and voltage transient protection

#### Large Scale

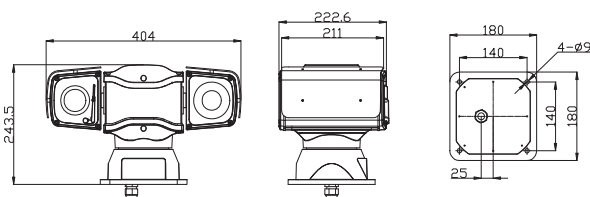
- 55x optical zoom

#### Abundant Functions and Features

- SD card optional, supports Automatic Network Replenishment (ANR)
- Up to 3 video streams
- Bi-directional audio / alarm in and out / video out
- Wiper supported

### Dimensions

Units: mm



### Specifications

	IPC523-F255-NR025-TU	IPC523-F255-NR050-TU	IPC523-F255-NR150-TU
<b>Thermal Module</b>			
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays		
Resolution	400 x 300		800x600
Lens	25mm	50mm	
Detector Pitch	17µm		
NETD	< 40mk (@25°C, F#=1.0)		
Response Waveband	8µm ~ 14µm		
Color mode	up to 9 modes		
<b>Optical Camera</b>			
Image Sensor	1/1.8" Progressive Scan CMOS		
Pixels	2.0 Megapixel		
Min. Illumination	Color: 0.001Lux @ (F1.2, AGC ON) B/W: 0.0001Lux @ (F1.2, AGC ON); 0Lux with IR		
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	6.6 ~ 363mm, 55x optical		
Zoom Speed	Approx 4s (Optical)		
Angle of View	43.8° ~ 1° (Wide-Tele)		
Min. Object Distance	300 ~ 1500mm (Wide-Tele)		
Max. Aperture Ratio	F1.6 (Wide) / F6.0(Tele)		
Focus Control	Auto / Manual / Semi-Automatic		
<b>Pan and Tilt</b>			
Pan / Tilt Range	360° Endless / - 85° ~ 85° (Auto Flip)		
Pan / Tilt Speed	Pan manual speed: 0.1° ~ 120°/s; Pan preset speed: 120°/s Tilt manual speed: 0.1° ~ 30°/s; Tilt preset speed: 100°/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 / Pan scan		
PT Limit	Manual / Scan / Pan		
3D Positioning	PTZ control with mouse click and drag		
Wiper	Supported		
<b>Video</b>			
Compression Format	H.265 / H.264 / MJPEG		
Image Resolution	Main stream: 1080p		
	Secondary stream: D1		
	Triple stream: 1280x720@30fps		
Frame Rate	Main stream: 1080p@60fps		
	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		
Optical 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, HTTP,HTTPS, SSH, DHCP, DNS, DDNS, RTP/RTCP, RTSP, PPPoE, 802.1x, QoS, SMTP, UPnP, SNMP, IGMP, IP Filter, IPv4, IPv6 (optional)		
User Interface	IPC Control (IE, Firefox, Chrome)		
Max. User Access	Max. 10 Users (include 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 / Entry Guard Area / Guard line / Enter guard area / Exit guard area / Object left / Object removal / Gathering / Audio surge / Fire detection		
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	2 x Input / 2 x Output		
Video Out	1 x BNC, 1.0V [p-p] / 75Ω		
Memory Slot	Built-in Micro SD card (optional), up to 128GB		
<b>Environmental</b>			
Operating Temperature	-40°C ~ 70°C / -40°F ~ 158°F		
Operating Humidity	10% ~ 95%		
Protection Level	IP66, TVS 6000V lightning protection, surge protection and voltage transient protection		
<b>Electrical</b>			
Power	24V AC / 3A (Power adapter included)		
Power Consumption	Max. 70W		
<b>Mechanical</b>			
Weight	10kg / 22lb (Gross Weight)		
Dimensions	404 x 222.6 x 243.5mm / 15.9" x 8.76" x 9.59"		