INVID-K164T412-247C

(12) 4-Megapixel Turret Cameras with (1) 16 Channel NVR, 24/7 Full-Color Day AND Night Cameras
(1) PN1A-16X16-2NH2
(12) PAR-P4TXIRL28NH-AI
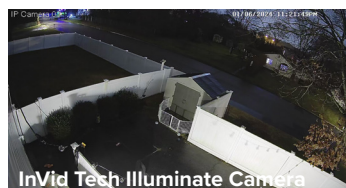
4K NVR Kit
INVID-K164T412-247C
H.265+ 4K Ultra High Definition NVR

The camera does have white lights. They are off by default because they are not needed. InVid Tech Illuminate provides a 24/7 Color Picture.
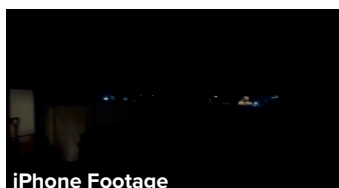
PAR-P4TXIRL28NH-AI

4 Megapixel IP Plug & Play, Outdoor Turret, 24/7 Full-Color Day AND Night, True AI, Fixed lens, Audio Input: Built-in Mic, Audio Output, SD Card Slot, 12VDC/PoE
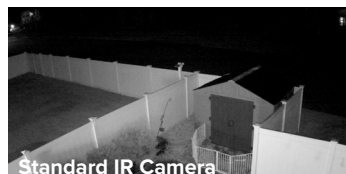
Camera Features

- True AI Human and Vehicle Classification for Line Crossing and Intrusion Detection
- 24/7 Full-Color Day & Night with InVid Tech Illuminate
- 4 Megapixel Resolution
- Fixed Lens
- H.265+ / H.265 / H.264+ / H.264
- 30 FPS Recording and Live
- SD Slot For Local Storage: Up to 1 TB
- Audio Input: Built-in Mic
- Audio Output
- IP67 Weatherproof
- 12VDC/PoE Operation
- ONVIF
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS)
- Free MAC Client
- NDAA Compliant
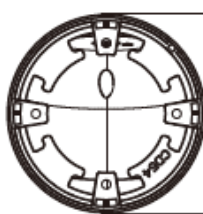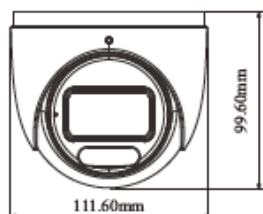
InVid Tech Illuminate Camera
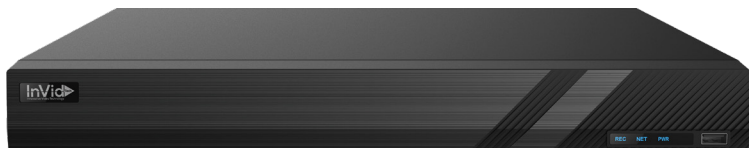
iPhone Footage

Standard IR Camera

Here is an example of some real camera footage from the InVid Tech Illuminate Series. You can find a video of this on our website. This is real footage with very minimal light. Notice all the colors! The iPhone footage shows how dark the area was. And you can see the difference of a standard IR camera vs InVid Tech Illuminate!

99.60mm
111.60mm

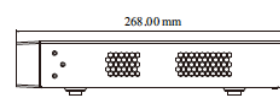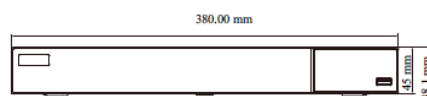| Camera	PAR-P4TXIRL28NH-AI
Image Size	1 / 1.79 "CMOS
Image Sensor	2688 × 1520
Electronic Shutter	Auto or manual mode; manual mode: 1 / 2s ~ 1 / 100000 s
Iris Type	Fixed Iris
Min. Illumination	0.0003 lux @F1.0, AGC ON; 0 lux with illumination on
S/N Ratio	≥50dB
Lens	2.8 mm@F1.0, H.FoV: 112°; V.FoV:61°; D.FoV:133°
Focus	Fixed
Lens Mount	M12
Wide Dynamic Range	Digital WDR
BLC	Yes
HLC	Yes
Defog	Yes
Digital NR	3D DNR
Angle Adjustment	Pan: 0°~360°; Tilt:0°~80°; Rotation: 0°~360°
Image	
Video Compression	Main stream: H.265+/ H.265 / H.264+ / H.264 Sub stream/Third stream: H.265+/ H.265 / H.264+ / H.264/ MJPEG Fourth stream/Fifth stream: H.265 / H.264 / MJPEG
H.264 Compression Standard	Baseline Profile/Main Profile/High Profile
Resolution	4MP (2688×1520),2K (2560×1440), 3MP(2304×1296),1080P (1920×1080), 720P (1280×720), D1, VGA (640 ×480), CIF, 480×240
Main Stream	4MP/2K/3MP/1080P(60Hz : 1 ~ 30fps; 50Hz: 1~25fps)
Sub Stream	1080P/720P/D1 (60Hz : 1 ~ 30fps; 50Hz: 1~25fps)
Third Stream	720P/D1/VGA/CIF/480×240 (60Hz : 1 ~ 30fps; 50Hz: 1~25fps)
Fourth Stream	D1/VGA/CIF/480×240 (60Hz : 1 ~ 30fps; 50Hz: 1~25fps)
Fifth Stream	D1/VGA/CIF/480×240 (60Hz : 1 ~ 30fps; 50Hz: 1~25fps)
Bit Rate	64 Kbps ~ 8 Mbps
Bit Rate Type	VBR / CBR
Audio Compression	G711A / U
Image Settings	ROI, Saturation, Brightness, Hue, Contrast,Wide Dynamic, Sharpness, Image Flip, Image Mirror, NR, etc. adjustable through client software or web browser
ROI	Each ROI to be configured separately
Interfaces	
Network	RJ 45
Video Output	No
Audio	1CH audio input; 1CH audio output; 1CH built-in microphone
Storage	Built-in micro SD card slot; up to 1 TB
Reset	Yes
Alarm	1CH alarm input; 1CH alarm output
Intelligent Analytics	
Smart Event	Line crossing, region intrusion/entrance/exiting (human/vehicle classification), abandoned/ missing object detection, crowd density detection
Statistics	Target counting by line, heat map
Exception Detection	Scene change, video blur and abnormal color detection
Face Detection	Face detection and face capture
Video Metadata	Simultaneously captures human body, motor vehicle and non-motor vehicle and extracts 13 human features, 5 motor vehicle features and 1 non-motor vehicle feature
DORI Distance	
DORI Distance	Lens	Detect (ft)	Observe (ft)	Recognize (ft)	Identify (ft)
	2.8mm	170 (52m)	68 (21m)	33 (10m)	17 (5m)
Functions	
Remote Monitoring	Web Browser, Paramont DVR/NVR, Paramont CMS AI, Paramont CMS App
Web Browser	IE11(plug-in required)/Chrome 92.0+/Edge 92.0+/Firefox 91.0+/Safari 13.1+
Online Connection	Support simultaneous monitoring for up to 3 users; Support multi-stream real time transmission
Network Protocol	UDP, IPv4, IPv6, DHCP, NTP, RTSP, RTP, RTCP, RTMP, FTP, PPPoE, DDNS, SMTP, SNMP, HTTP, 802.1x, UPnP, HTTPS, HTTP POST, QoS
Interface Protocol	ONVIF
Storage	Network remote storage; micro SD card storage
Smart Alarm	Motion detection, sensor alarm, SD card error, SD card full, IP address conflict, cable disconnection
General Function	Watermark, video mask, heartbeat, image distortion correction, corridor pattern
Security	Video encryption, firmware encryption, HTTPs encryption, configuration encryption, illegal login lock, IP address filtering, 802.1x authentication, basic and digest authentication for HTTP
PoE	Yes , IEEE802.3af
White Light Range	Up to 98' (30 m) (Off by Default. Optional Use. But NOT Needed.)
Ingress Protection	IP 67
Others	
Power Supply	DC12V/PoE
Power Consumption	< 5.5W
Storage Conditions	-22°F~149°F (- 30 °C ~ 65°C), Humidity: less than 95 % (non-condensing)
Operating Conditions	-22°F~140°F (- 30 °C ~ 60 °C), Humidity: less than 95 % (non-condensing)
Dimensions	Φ 4.4 x 3.9 in (Φ 111.6 × 99.6 mm)
Weight (net)	Approx. 1.4lbs (0.623KG)
Installation	Ceiling mounting; Wall mounting
Certificate	CE, FCC
Environmental Protection	Directive EU RoHS, WEEE(2012/19/EU) , directive 94/62/EC and REACH(EC1907/2006)

PN1A-16X16-2NH2

16 Ch NVR with 16 Plug & Play Ports, 160 Mbps, 2 HD Bays, 4k

Features

- 16 Plug & Play Ports for easy camera setup PoE (Power Over Ethernet) available on all ports
- Up to 8 Megapixel Resolution Recording
- 160 Mbps Bit Rate Input
- Supports up to 16 channel simultaneous playback
- Smart Analytic Support/ AI by ONVIF
- Local HDMI main monitor output with 4K support
- Local VGA main monitor output up to 1080p
- True P2P Connectivity with QR Code Connect
- Multiple video search options including Smart Search for quick retrieval of footage.
- H.265S/ H.265+/ H.265/ H.264
- 2 Hard Drive Bays
- Free iOS & Android Apps for Smart Phones & Tablets
- Free Central Management Software (CMS) to manage multiple units & sites from a single platform
- Free MAC client software to easily manage your system from your Apple computer
- NDAA Compliant

System	PN1A-16X16-2NH2
OS	Embedded Linux
Video	
Network Input	16CH IPC input
Network Input Resolution	8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/CIF
Output	HDMI × 1 : 3840 × 2160 / 1920 × 1080 / 1280 × 1024/ 1024 × 768 VGA: 1920 × 1080 / 1280 × 1024/ 1024 × 768
Screen Display Mode	1/4/6/8/9/13/16
Compression	H.265S /H.265+ / H.265 / H.264
Audio	
Network Input	16 CH IPC audio input
Local Input	RCA × 1 (for two-way audio)
Local Output	RCA × 1
Compression	G.711(U/A)
Record	
Resolution	8MP/6MP/5MP/4MP/3MP/1080P/1280×1024/960P/720P/960H/D1/CIF
Frame Rate	NTSC:30fps; PAL:25fps
Playback	
Simultaneous Playback	Max.16 CH
Search	Time slice / time / event / tag / smart search
Smart Search	Highlighted color to display the camera record in a certain period of time, different colors refers to different record events
Function	Play, pause, FF, FB, digital zoom, etc.
Decoding Capability	
Live View/ Playback	1×8MP@30fps; 6×1080P@30fps
Alarm	
Mode	Manual, sensor, motion, exception, smart events
Input	Supports IPC alarm input
Output	Supports IPC alarm output
Triggering	Record, snap, preset, e-mail, etc.

Network	
Interface	RJ 45 × 1 (10/100/1000Mbps)
Protocol	TCP / IP, IPv4, IPv6, UDP, PPPoE, DHCP, DNS, DDNS, UPnP, NTP, HTTP, SMTP, HTTPs, 802.1x, RTSP, RTP, RTCP, Web-Socket, SNMP, IGMP, ONVIF
Incoming/ Outgoing Bandwidth	160/160(Mbps) *When the AI function of the IPC is enabled, the actual incoming bandwidth(max.bitrate) is more than the set value in the NVR.
Client Connection	Max. 64 users access
Face	
Face Detection Performance (AI by IPC)	16 CH (NH-AI Models)
Face Detection Performance (AI by Device ONVIF)	2 CH/ 2MP
Face Match Performance	No (Does NOT Support Facial Recognition)
Statistical Graph of Information	Bar graph
Statistical Mode of Information	Statistics by day, week, month, quarter as well as customized time period
Video Structure Analysis	
Human/Vehicle Classification (AI by IPC)	Up to 16 CH
Human/Vehicle Classification (AI by Device)	2 CH
Human/Vehicle Attribute Analysis	Yes (AI by IPC)
Other Functions	
Fisheye	Supports fisheye dewarping via Web Client and mobile APP
Plate Recognition (AI by IPC)	Up to 16 CH
Mobile Device	
OS	iOS, Andriod
Storage	
HDD Interface	SATA3.0 × 2, up to 18TB
Backup	
Local Backup	USB, USB To HDD (1TB Max)
Network Backup	Yes
Port	
USB	USB 2.0 × 2, USB to
Remote Controller	Included
PoE	
PoE Ports	100M RJ45 × 16
Standards	IEEE802.3AF/AT
Output Power	≤ 150W
Others	
Power Supply	DC 48V/3.75A
Consumption	≤ 10W (without HDD)
Dimensions (W × D × H)	15 x 10.6 x 1.8In (380 × 268 × 45 mm)
Working Environment	14°F ~ 122°F (-10°C ~ 50°C)10% ~ 90% humidity
Certificate	CE, FCC, ETL: 5025761
Environmental Protection	Complies with Directive EU RoHS, REACH and WEEE

Ordering Information
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