

Impath Networks IP Series

IP4500 Dual Stream IP PTZ Dome Camera



H.264, MPEG-4, MJPEG (Dual Stream)

- H.264 25/30 fps@D1 with 2-way Audio
- Built-in Video Content Analytics (VCA)
- Day & Night (IR Cut Filter), DSS
- De-interlacing on DSP
- Burnt-in Text & Video Motion Detection Support
- Based on Texas Instrument's DaVinci™ Video Processors
- SDK available for simple integration
- Stealth Spin® (Silent Speed Dome)
- 0.024° Dome System Accuracy with 1/8 micro Step
- Controlled Pan/Tilt Speed While Zooming
- Designed for Harsh Environments
- Power Disconnect Monitoring via RS-485 Terminal

Specifications

Camera Module

Image Sensor	1/4" Sony Ex-View HAD CCD
Number of effective Pixels	NTSC - 768(H) x 494(V) 380 K PAL - 752(H) x 582(V) 440 K
Horizontal resolution	Greater than 480 TVL
Zoom (Optical) (Digital)	36x Optical Zoom (F=1.6~F4.5, f=3.4 to 122.4 mm) 12x Digital (432x including optical)
Day & Night (ICR)	Auto / Day / Night
Min. Viewing Distance	0.32m (Wide) / 1.5m (Tele)
Digital Slow Shutter	ON / OFF
Minimum Illumination	1.4 Lux (50 IRE): (Normal mode), 0.01 Lux (ICR On): (Night mode)
Luminance S/N ratio	Better than 50dB
BLC	ON / OFF
Flicker reduction (NTSC)	ON / OFF

Pan / Tilt	
Pan Rotation Angle	360° Endless Rotation
Pan Speed (Manual) (Preset)	0.5°~ 100 or 200°/ sec (64 steps) Max 300°/ sec, Min 10°/ sec
Tilt Rotation Angle	From -2° to 90°
Tilt Speed (Manual) (Preset)	From 0.5 to 45°/ sec (64 steps) Max 250°/sec, Min 200°/ sec
System Accuracy	0.024°
Dome	
Presets	165 positions with 16 character labels available for each position with different speed steps
Guard Tour	Max 8 Groups (Each one consisting of up to 60 steps)
Auto Pan	Programmable Auto Scan
Pattern	8 Programmable Patterns (Total 480 seconds)
Sector	9 Selectable Sectors with 16 characters
Privacy Zone	24
Auto Flip	On / OFF
OSD menu	Yes
Video	
Compression Format	H.264, MPEG-4, MJPEG
Number of Streams	Dual Stream, Configurable
Resolution	D1, CIF, QCIF
Compression FPS	25/30 fps@D1
De-interlacing	Support (DSP)
Motion Detection	Support (DSP)
Burnt-in Text (Digital)	Support (DSP)
Output	1 Loop Out (BNC Connector)
Audio	
Input / Output	1 channel
Compression Format	G.711
Function	
Digital Input / Output	4 inputs / 2 outputs
RS-485	Supported
Network	10 / 100 Base-T
Protocol	TCP/IP, UDP/IP, HTTP, RTSP, RTCP, RTP/UDP, RTP/TCP, SNTP, mDNS, UPnP, SMTP, SOCK, IGMP, DHCP, DDNS, SSL v2/v3, IEEE 802.1X, SSH
SD Memory Card Slot	Supports MicroSD type

Power	
Power Source	18~32 VAC 60/50Hz 1.5A (outdoor)
Power Consumption	36W Max
Environmental	
Fan / Heater	Fan and heater (built-in)
Operating Temperature	-40 °C ~ +50° C (-40 °F ~ +122 °F)
Certification	FCC/ CE, IP66
Operating Humidity	Up to 85% RH (Non-condensing)
Others	
Material Construction	Aluminum - Anti-Vandal bubble (Poly Carbonate)
Color	Cool gray
Dimension	Housing: 190(W) x 307(H) mm
Weight (Approx)	5.7 kg (outdoor)
Video Content Analysis (Included as Standard)	
High Performance	Advanced Tracking Algorithm, Low False Alarm Rate
Easy to Use	Intuitive Web Browser Interface
Detection Zones	Multi-segment Polygons and Lines
On-screen Display	Real-time Display of Tracking Data and Events
Video Content Analysis (Optional)	
Detection Behavior	Direction, Stopping, Loitering, Entering, Exiting, Appear and Disappear Filters
3D Behavior	Perspective Corrected Size and Speed Filters
Statistics	Counting Functions and Other Statistics
Meta Data	Binary XML Format
Image Stabilization (Optional)	
Electronic	





Impath Networks integrated analytics

Impath Networks series of IP cameras includes video analytics utilizing a VCA analytics engine. The basic package is 'VCApresence' with an optional upgrade to the advanced feature set of 'VCAsurveillance' (see below for more details). Video analytics can be provided at the heart of a surveillance solution by integration with NVR/DVRs but also at the edge by being embedded in your cameras.

At the heart of VCA analytics (both VCApresence and VCAsurveillance) is a unique tracking engine, which eliminates the complicated setup associated with other video-analytics software, which can have as many as 100 algorithm setup parameters for aspects such as digital filters or adjustments for various lighting conditions. In contrast, VCA analytics has no algorithm parameters; instead, it automatically adjusts to the conditions it encounters. This not only eases the job of integrating the software into IP cameras, it is now possible for relatively untrained personnel to easily set up a surveillance system.

Tools to configure zones, lines, rules, calibration and object classification are all included. The analytics can be integrated with non-Impath IP products provided that they can stream appropriate raw video files or video from DirectShow capture devices, or via a pipe connection to a VLC player. VCA's intelligent video analysis software "**VCA sys 0.98.15**" running on video encoders has passed a milestone for edge detection systems by obtaining approval as an **i-LIDS® approved secondary detection system for operational alert use in sterile zone monitoring applications**. VCA is listed in the UK Government's catalogue of approved security equipment.

VCA software turns a video camera into an intelligent, information-gathering device. Systems can perform intelligent analysis of motion with application areas including:

- Intrusion detection
- Vehicle monitoring
- Abandoned-object detection
- People counting
- Loitering detection
- Camera tampering and failure detection

Dependable Support

To support our clients Impath Networks has a dedicated Application Engineering (AE) team to provide technical support and guidance concerning the integration of our products and the use of our SDK.

Our AE team is a pre-sales and post-sales resource to ensure that our clients have a complete understanding of our hardware products, their features and the elements of the SDK necessary to ensure a successful integration with the your video management software.

For more information on Impath Networks IP Series of cameras and SDK software contact sales@impathnetworks.com