## Pioneer of IP Innovation

## () PLANET

## Full HD 20M IR Vari-Focal Dome IP Camera

## ICA-4200V


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Networking \& Communication

## Presentation Outline

- Product Overview
- Product Features
- Management
- Product Application
- Product Comparison



## IP Surveillance

Full HD 20M IR Vari-Focal Dome IP Camera

Supported

## Product Overview

- Camera Naming Rule


Wireless Function

- Wi-Fi-W

Camera Type

- Cube-1
- Box-2
- Bullet-3
- Dome-4
- Vandal Dome-5
- Speed Dome - 6
- PTZ-7
- Fisheye - 8


## Resolutions

- VGA / D1-0
- 1M/720P-1
- Full HD (2M) - 2
- 3MP-3
- 4MP - 4
- 5MP-5


## Camera Function

- Vari-Focal - V
- Industrial - T


## Product Overview

- PLANET IP Surveillance - Dome type Product Classification



## Product Overview

- Front Panel View of ICA-4200V

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## Product Overview



## Product Features

## Camera

$\checkmark$ Sony's 1/2.8 type "Exmor" Progressive scan CMOS sensor
$\checkmark \quad 3.3 \sim 12 \mathrm{~mm}$ Vari-focal, DC Auto-iris Lens
$\checkmark \quad 0.5$ Iux Minimum Illumination at F1.2
$\checkmark$ Maximum resolution $1920 \times 1080$
$\checkmark$ Removable IR-cut Filter for Day \& Night Function
$\checkmark$ Built-in PIR sensor ( $6 \mathrm{~m} / 120$ degree coverage) for thermal / motion detection

- Video and Audio
$\checkmark$ H. 264 / MPEG4 and MJPEG video compression simultaneously
$\checkmark$ Simultaneous multi-stream support
$\checkmark$ H. 264 high profile, main profile and baseline
$\checkmark$ Max. Resolution 1080P at 30fps
$\checkmark$ 3DNR to improve picture quality at low Lux
$\checkmark$ WDR Enhancement for enhance visibility under extremely bright or dark environments
$\checkmark$ Two-way audio support with enhanced audio quality


## Product Features

## Network and Configuration

$\checkmark$ Compliant with IEEE 802.3af PoE interface for flexible deployment
$\checkmark$ Equipped with Gigabit Ethernet port
$\checkmark$ Auto MDI/MDI-X supported
$\checkmark$ Support for IPv6 in addition to the standard IP protocol version 4
$\checkmark$ RTSP / UPnP / 3GPP / HTTPS protocols selectable

- Easy Installation \& Management
$\checkmark$ Onvif compliant for interoperability
$\checkmark$ Built-in 12 IR Illuminators, effective up to 20 meters
$\checkmark$ Intelligent Motion / Tampering / Audio detection alarm triggers
$\checkmark$ Built-in Samba client for NAS
$\checkmark$ 3GPP for 3G mobile remote applications
$\checkmark$ Micro SD card local video recording supported
$\checkmark$ RS485 interface for P/T scanner control
$\checkmark$ Digital Input/Outputs for integration with sensors and alarms
$\checkmark$ Cam Viewer 3 Central management software supported


## Product Features

- Superb Full HD Quality for Professional Surveillance
$\checkmark$ Supports H.264, MPEG-4, and MJPEG compression formats and delivers excellent picture quality in Full HD resolutions at $\mathbf{3 0}$ frames per second (fps).

30 fps


10 fps


1 fps


## Product Features

- High-Definition Television Resolutions

Full HD
$\checkmark$ HDTV provides up to five times higher resolution than stanaara anaıog TV. Full HD also has better color fidelity and a 16:9 format.


## Product Features

- Day \& Night functionality
$\checkmark$ With Removable IR-cut filter and built-in IR illuminators, which enables the camera to provide color video when there is sufficient light, and black/white video in dark conditions.



## Product Features

- Exceptional Image quality
$\checkmark$ WDR (Wide Dynamic Range) Enhancement for enhance visibility under extremely bright or dark environments



## Product Features

- Exceptional Image quality
$\checkmark$ 3DNR (3-Dimension Noise Reduction) to improve picture quality at low Lux



## Product Features

- Passive InfraRed (PIR) Sensor
$\checkmark$ The built-in PIR motion detection sensor in the ICA-4200V will "detect" and start recording automatically. It is able to detect movement far from 6 meters away.



## Product Features

- Camera Tampering and Audio Detection
$\checkmark$ Active Tampering Alarm detects incidents such as the camera is attacked, spraypainted, or intentionally covered. Active Audio Alarm detects incidents such as screams, glass breaking and etc are detected



## Product Features

## - Support 2-way Audio

- With 2-Way audio function, IP camera becomes a bridge that helps users to talk to other people.
- Via two IP cameras, users can easily communicate to each other no mater for a international meeting or a personal chat.



## Product Feature

- Power over Ethernet
$\checkmark$ IEEEE802.3af support makes the camera can be installed anywhere without the need for additional power socket for the IP camera.


Compliant with IEEE 802.3af standard PoE interface. It can assist in locating cameras in places where there are no power outlets.

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## Product Features

- Surveillance On-The-Go
$\checkmark$ With the iCV3a app for iPhone/iPad or aCV3m for Android, you can quickly and easily see your camera feed from anywhere with Wi-Fi or 3G connection.


iPhone users
click here


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## Product Features

- Access anytime \& anywhere

Sign-in PLANET Easy-DDNS to register a simple domain name to access home device anytime and anywhere.


## Application

- Provide various surveillance applications
$\checkmark$ PLANET ICA-4200V can be applied in various surveillance applications. It captures clear images and is perfect for the identification of objects and people in indoor surveillance. Moreover, the ICA-4200V supports 802.3af PoE interface to facilitate the surveillance deployment without worrying the electric source.



## Product Comparison - Internal

| Model | ICA-4200V | ICA-HM132 |
| :---: | :---: | :---: |
| Features |  |  |
| Sensor size in megapixel | Full HD | 2.0 Mega-Pixel |
| Sensor | 1/2.8" Sony Exmor Progressive CMOS | 1/3" 2Mega-Pixel CMOS Sensor |
| Lens | 3.3~12.0 mm, F1.2 | 2.7 ~ 9.0 mm, F1.2 |
| Max resolution @ FPS | 1920*1080@30fps (16:9) | 1600*1200 @15fps (4:3) |
| PIR | v | - |
| WDR | v | - |
| 3DNR | V | - |
| PoE | V (8W max) | V (6W max) |
| 2-Way Audio | V | V |
| ICR | v | v |
| IR Distance | V (20 meter) | V (20 meter) |
| Tampering Detection | V | - |
| Audio Detection | V | - |
| IPv6 | V | - |
| Local storage | V (mSD) | V (mSD) |
| PLANET DDNS | V | V |
| ONVIF | V | V |

## Product Comparison - External

| Model | PLANET ICA-4200V | $\begin{aligned} & \text { Sony SNCDH1 } 20 \\ & \$ 798.00 \text { U.S. } \end{aligned}$ |
| :---: | :---: | :---: |
| Features |  |  |
| Sensor | 1/2.8" Sony Exmor Progressive CMOS | 1/3" Sony Exmor Progressive CMOS |
| Lens | $3.0 \sim 9.0$ mm, F1.2~2.7 | $3.1 \sim 8.9$ mm, F1.2 |
| Image Compression | H. 264 / MPEG4 / MJPEG | H. 264 / MPEG4 / MJPEG |
| Max resolution @ FPS | $\begin{gathered} 1920 * 1080 \text { (30fps) } \\ 1280 * 720 \text { (30fps) } \end{gathered}$ | $\begin{gathered} 1280 * 1024 \text { (20fps) } \\ 1280 * 720 \text { (30fps) } \end{gathered}$ |
| PIR | V | - |
| WDR | V | - |
| 3DNR | V | - |
| PoE | $V$ (8W max) | $V$ (6W max) |
| 2-Way Audio | V | V |
| ICR | V | V |
| IR Distance | V (20 meter) | - |
| Tampering Detection | V | - |
| Audio Detection | V | - |
| Local storage | $V$ (mSD) | - |
| IPv6 | V | - |
| ONVIF | V | V |

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## Appendix Sales Target

- Target Markets
$\checkmark$ IP Surveillance System Integrator
$\checkmark$ SMB Office / Home Security
$\checkmark$ Reseller

- Target Customers
$\checkmark$ Who buy our Dome Type IP Camera
- ICA-HM131 / ICA-HM131R
- ICA-HM132
- ICA-HM136
- ICA-5350V

- CAM-DM33

Who buy our CV3P / NVR

- NVR-401 / NVR-420
- NVR-810 / NVR-1610
- NVR-3210 / NVR-3250



## Activating IP Power



## Appendix Must Know

## Technical Zone

## Bandwidth and Video Size Estimation

- The frame rate of video transmitted from the Internet Camera depends on connection bandwidth between client and server, video resolution, codec type, and quality setting of server. Here is a guideline to help you roughly estimate the bandwidth requirements for your Internet Camera.
- The required bandwidth depends on content of video source. The slow motion video will produce smaller bit rate generally and fast motion will produce higher bit rate vice versa. Actual results generated by the Internet Camera may be varying.

| Image Resolution | Average range of data sizes for JPEG mode | Average bit rate for MPEG4 mode | Average bit rate for H. 264 <br> mode |
| :---: | :---: | :---: | :---: |
| $320 \times 240$ | 8 ~ 20k byte per frame | 256kbps~768kbps <br> @ 30fps | 192kbps~512kbps <br> @ 30fps |
| $640 \times 480$ | $20 \sim 50 \mathrm{~K}$ byte per frame | $512 \mathrm{kbps} \sim 3072 \mathrm{kbps} @$ 30fps | 384kbps~1536kbps <br> @ 30fps |
| $\begin{gathered} 1920 \times 1080 \\ \text { Full HD } \end{gathered}$ | $\begin{aligned} & 200 \sim 500 \mathrm{k} \text { byte per } \\ & \text { frame } \end{aligned}$ |  | 1536kbps~10000kbps <br> @ 30fps |
| $\begin{gathered} 2048 \times 1536 \\ 3 \mathrm{MP} \\ \hline \end{gathered}$ | $\begin{aligned} & 300 \sim 750 \mathrm{k} \text { byte per } \\ & \text { frame } \end{aligned}$ |  | 2048kbps~12000kbps @ 30fps |

