

## Product Specifications

### Industrial Internet Video Server

#### IVS-2120

Version 1.0

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#### Change History:

Revision	Date	Author	Change List
Version 1.0	2014/5/28	Anthony Chen	Initial release

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## 1. PRODUCT DESCRIPTION



### **Built-in SFP Transceiver to Extend Transmission Distance**

PLANET IVS-2120 one-channel PoE Internet Video Server offers the highly-efficient H.264 video compression, which greatly reduces bandwidth without compromising image quality. When the IVS-2120 and the other side of the device are inserted with a fiber module, the maximum transmission distance can be extended by up to 20km or more. Its industrial rugged design, which includes a -30 to 60 degrees C operating temperature, IP30 form factor protection, and industrial certifications, make the IVS-2120 suitable for harsh environments.

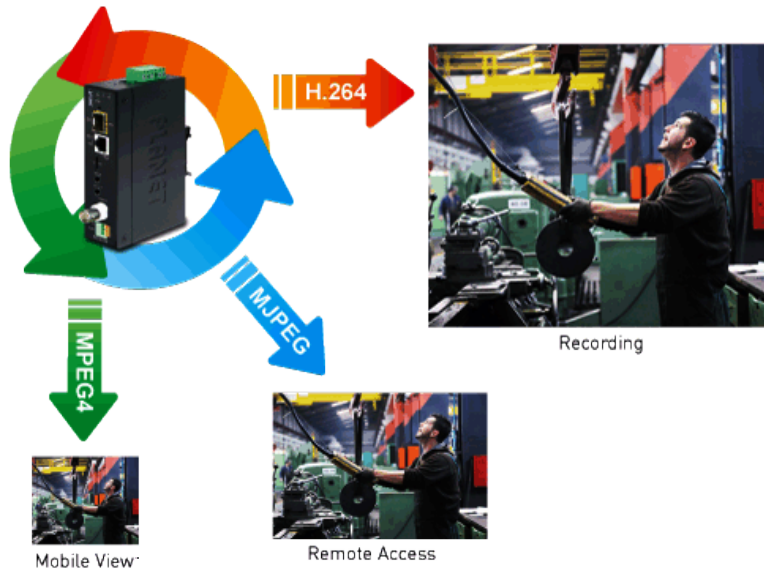
It provides an easy and high-quality solution to integrating analog CCTV cameras into the IP-based video surveillance system. The IVS-2120 is the ideal choice for casinos, airports, traffic surveillance, prisons or anywhere an analog surveillance system is already installed and full frame rate is needed.



### Full Frame Rate in All Resolutions

The IVS-2120 supports H.264, MPEG-4, and M-JPEG compression formats to deliver excellent picture quality in 4CIF (D1) resolutions at 30/25 (NTSC/PAL) frames per second (fps). It also can deliver multiple, individually configurable video streams simultaneously at full frame rate in all resolutions, meaning several video streams can be configured with different compression formats, resolutions and frame rates for different needs.

Supporting simultaneous multiple resolutions and video compressions can generate different video streams per user's demand.

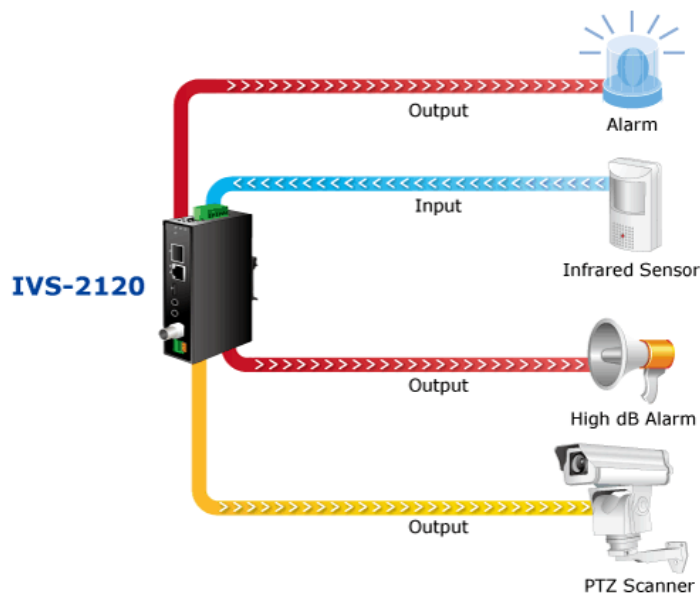


### Advanced Event Management

The IVS-2120 supports a number of advanced features that increase monitoring flexibility and capabilities, including AV out to perform the Two-Way audio function, micro SD/SDHC card slot for local storage, RS-485 for connection to an optional pan/tilt enclosure and input/output port for connecting external sensor devices such as door sensors and light relays to enable real-time alarm notification and event management.

#### Digital Input /Output

#### For External Sensor in and Alarm out



## Dual Power Source and Temperature Detect Functionality

The IVS-2120 comes with IEEE 802.3af Power over Ethernet (PoE) and dual power source which is the best redundancy solution. The IVS-2120 has a built-in temperature detector to show the temperature with working environment. The IVS-2120 is ONVIF-compliant and therefore interoperable with other brands in the market. As it includes 64-CH central management software, the IVS-2120 is indisputably the top choice for reliable and high-performance surveillance.

## 2. PRODUCT FEATURES

### Video / Audio

- H.264 / MPEG-4 and M-JPEG video compression simultaneously
- Simultaneous multi-stream support
- Up to 30/25fps (NTSC/PAL) for all profiles
- 3DNR (3D Noise Reduction) to improve picture quality at low lux
- 2-way audio support with enhanced audio quality
- Event trigger by audio detection
- Standard RTSP (real-time streaming protocol) video streaming for easy integration

### Network and Configuration

- Auto MDI/MDI-X supported
- Compliant with IEEE 802.3af PoE interface for flexible deployment
- Supports both IPv6 and IPv4 protocols
- Supports SFP module hot plug for quick operation
- RTSP / UPnP / 3GPP / HTTPS protocols selectable

### Easy Installation & Management

- ONVIF compliant
- Built-in Samba client for NAS
- 3GPP for 3G mobile remote applications
- Redundant 12~48V DC and 24V AC power inputs for greater reliability
- RS-485 interface for P/T scanner control
- Built-in micro SD/SDHC card slot for on-board storage
- Digital Input / Output for integration with sensors and alarms
- Cam Viewer 3 central management software supported
- Metal housing with IP30 protection against dust
- DIN-Rail mounting installation for industrial environments
- Industrial design with -30 to 60°C operating temperature

## 3. PRODUCT SPECIFICATIONS

### 3.1 FUNCTIONAL SPECIFICATIONS

Model	IVS-2120
<b>Image</b>	
Video Compression	H.264 / MPEG-4 / M-JPEG
Video Resolution	4CIF , CIF, QCIF
Frame Rate	30/25fps (NTSC/PAL) in all resolutions
Image Setting	AE, AWB 3D noise reduction Color, brightness, sharpness, contrast Mirror / Flip

	8 Privacy Masks Text, time and date overlay
<b>Streaming</b>	Simultaneous multi-profile streaming Streaming over UDP, TCP, or HTTP HTTPS M-JPEG streaming over HTTP (server push) Supports 3GPP mobile surveillance (MPEG4) Controllable frame rate and bandwidth Constant and variable bit rate (MPEG4/H.264) ROI
<b>Audio</b>	
<b>Audio Streaming</b>	Two-way audio
<b>Audio Compression</b>	RTSP: G.711 64kbps, G.726 32kbps 3GPP: AMR
<b>Microphone</b>	External microphone input
<b>Audio Output</b>	Adjustable audio output gain
<b>Network and Configuration</b>	
<b>Standard</b>	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3u 100Base-FX SFP
<b>Protocol</b>	IPv4, IPv6, TCP/IP, UDP, HTTP, HTTPS, SMTP, FTP, NTP, DNS, DDNS, DHCP, ARP, Bonjour, UPnP, RTSP, RTP, RTCP, IGMP, PPPoE, 3GPP, ICMP, Samba, SNMP
<b>Security</b>	Password protection, IP address filtering, HTTPS encrypted data transmission, user access log
<b>Users</b>	20 clients on-line monitoring at the same time
<b>System Integration</b>	
<b>Application Programming Interface</b>	Open API for software integration ONVIF Compliant
<b>Alarm Triggers</b>	Intelligent video motion detection, audio detection and external input
<b>Alarm Events</b>	File upload via FTP, Samba to NAS, SD card or email Notification via email, HTTP, and TCP External output activation Audio alerting output Pre- and post-alarm buffering
<b>Environment Specifications</b>	
<b>Power Requirements</b>	IEEE 802.3af Class 3 48V DC and 24V AC max. Redundant power with polarity reverse protection function
<b>Power Consumption</b>	3W (Max.)
<b>Operating Temperature</b>	-30 ~ 60 degrees C
<b>Operating Humidity</b>	20 ~ 80% (non-condensing)
<b>Weight</b>	448g
<b>Dimensions (W x D x H)</b>	135 x 87 x 32 mm
<b>Enclosure</b>	IP30 metal case
<b>Installation</b>	DIN rail kit and wall mount ear
<b>Emission</b>	CE, FCC
<b>Connectors</b>	10/100Mbps Ethernet, RJ-45 100Base-FX SFP BNC connector, 75 ohm impedance Terminal block for 1 alarm input and 1 output RS-485 interface for pan/tilt scanners control External mic input

	Composite video / audio output Micro SD/SDHC card (max. 32GB, Class 6) Factory default reset
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### 3.2 PHYSICAL SPECIFICATIONS

#### Dimensions (W x D x H)

135 x 87 x 32 mm

#### Weight

448g (gross weight)

#### Front Panel



<b>PWR</b>	This LED will always light on when the IVS-2120 is turned on.
<b>FAL</b>	If either Power1 (P1) or Power2 (P2) is connected, the FAL LED will light on. For the FAL LED to light off, both P1 and P2 need to connect to power source.
<b>P1</b>	When Power1 connects to power source, the LED will light on.
<b>P2</b>	When Power2 connects to power source, the LED will light on.
<b>Reset</b>	<p>This button is hidden in the pinhole. This button is used to restore to all the factory default settings. Sometimes restarting the IVS-2120 will make the system back to a normal state. If the system still got problems after restart, user can restore to the factory default settings and install it again. To restore the device, please follow the steps below:</p> <ol style="list-style-type: none"> <li>Insert the paper clip or any proper tool and press and hold the button down continuously.</li> <li>Hold it at least for 5 seconds and release the tool to get the device restored to the default settings and reboot again.</li> </ol> <p><b>Note:</b> Restoring to the factory default setting will lose all the previous settings including IP address forever. User needs to run the PLANET IP Wizard II program to search the device and configure it to let the device work properly again.</p>
<b>100FX</b>	When SFP transceiver connects to SFP receiver that LINK/ACT LED will light on.
<b>10/100TX (PoE)</b>	When RJ-45 cable connects to switch or PC, the LINK/ACT LED will light on.

**SD** When micro SD card is inserted into the slot and the IVS-2120 is writing data to micro SD card, the SD LED will light on.

**Mic in** Connect an external microphone to the IVS-2120.

**A/V Out** Audio/Video-out jack allows this device to output audio and video signal. Use the attached A/V cable to connect A/V device where white cable is for audio and yellow cable is for video.

**Note:**

1. The white jack is used for audio output, and yellow jack is used for video output.
2. The IVS-2120 could determine whether the monitor use NTSC or PAL format signal, and output the fitting video format to monitor automatically. Please connect the video jack (yellow) with the monitor properly before powering on the machine.

**DI / RS-485** The IVS-2120 provides a general I/O terminal block with one digital input and one output for device control. It has 4 pins that from left to right there are DI+, DI-, D+ terminal of RS-485 and D- terminal of RS-485.

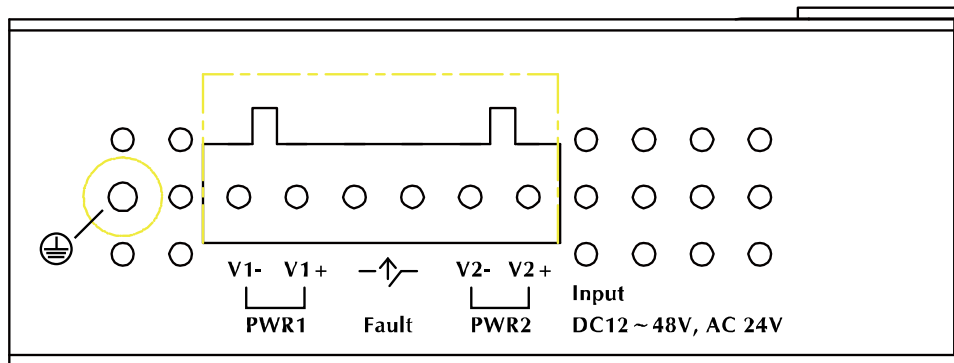


Name	Number	Function
DI+	1	Digital signal input with positive voltage
DI-	2	Digital signal input with negative voltage
485+	3	RS485 data +
485-	4	RS485 data -

**NOTE:**

1. The input voltage range of DI+ is DC 13~30V, maximum current is DC 8mA.

### Left-hand side Panel



This IVS-2120 provides dual power source for redundancy. The IVS-2120's built-in bridge rectifier output varies in accordance so that the polarity can be ignored. Just pay attention to its power range only.

#### Power / DO

Name	Number	Alias	Function
V1-	1	PWR1	Power1 input -- input range is DC 12V~48V and AC 24V.
V1+	2		
DO-	3	Fault	The Fault is digital output (DO) whose default status is open, when event trigger will change status to close. But if dual power like PWR1 and PWR2 is not connected, the Fault will be kept in the close mode.
DO+	4		
V2-	5	PWR2	Power2 input -- input range is DC 12V~48V and AC 24V.
V2+	6		

**NOTE:** User can see the LED power status on the front panel to know which power source is being connected to the IVS-2120.

### 3.3 ENVIRONMENTAL SPECIFICATIONS

#### Temperature

<b>Operating</b>	-30 ~ 60 degrees C
<b>Storage</b>	-35 ~ 70 degrees C

#### Operating Humidity

<b>Operating</b>	20 ~ 80% (non-condensing)
<b>Storage</b>	0 ~ 90% (non-condensing)

### 3.4 REGULATORY COMPLIANCE

FCC, CE, RoHS, WEEE

### 3.5 RELIABILITY

MTBF> 100,000hrs @ 25 degrees C

### 3.6 BASIC PACKAGING

IVS-2120 x 1  
Driver and User's Manual CD x 1  
Quick Installation Guide x 1  
A/V Cable x 1



Wall Package x 1

### 3.7 PACKAGE INFORMATION

<b>Dimensions (W x D x H)</b>	205 x 144 x 46 mm
<b>Weight</b>	574g
<b>Carton Dimensions (W x D x H)</b>	409 x 309 x 276 mm
<b>Carton Weight</b>	10.3 kg
<b>Carton Unit</b>	18 pcs. in one carton

### APPENDIX A: DEFAULT SETTING

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<b>Default DHCP Client</b>	On
<b>Default IP Address</b>	192.168.0.20 – if no DHCP existed in the network
<b>Default Login User Name</b>	admin
<b>Default Login Password</b>	admin
<b>Search Tools</b>	PLANET IP Wizard II