



AV over IP Solutions

Daniel Branton and
Kevin Cray

2020

OUTLINE



AV Over IP



Matrices



Extenders



Audio



Switchers



Converters



Signal Management



HDMI Cables



Commercial



Residential



Medical



Industrial

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/// IP-7000 Series (1G)

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Overview

The future is now.
It is called AV over IP.

The distribution of digital video/audio and control across an IP network. This is seeing more and more use as a flexible and scalable video distribution system.

AV over IP

Convergence of...

- Video (up to 4K2K@30Hz (RGB 4:4:4) or 4K2K@60Hz (YUV 4:2:0))
- Audio
- Power Over Ethernet (PoE)
- Control Signals – 2-way IR & RS232
- USB function (for KVM)

...using a 1Gb Network Switch

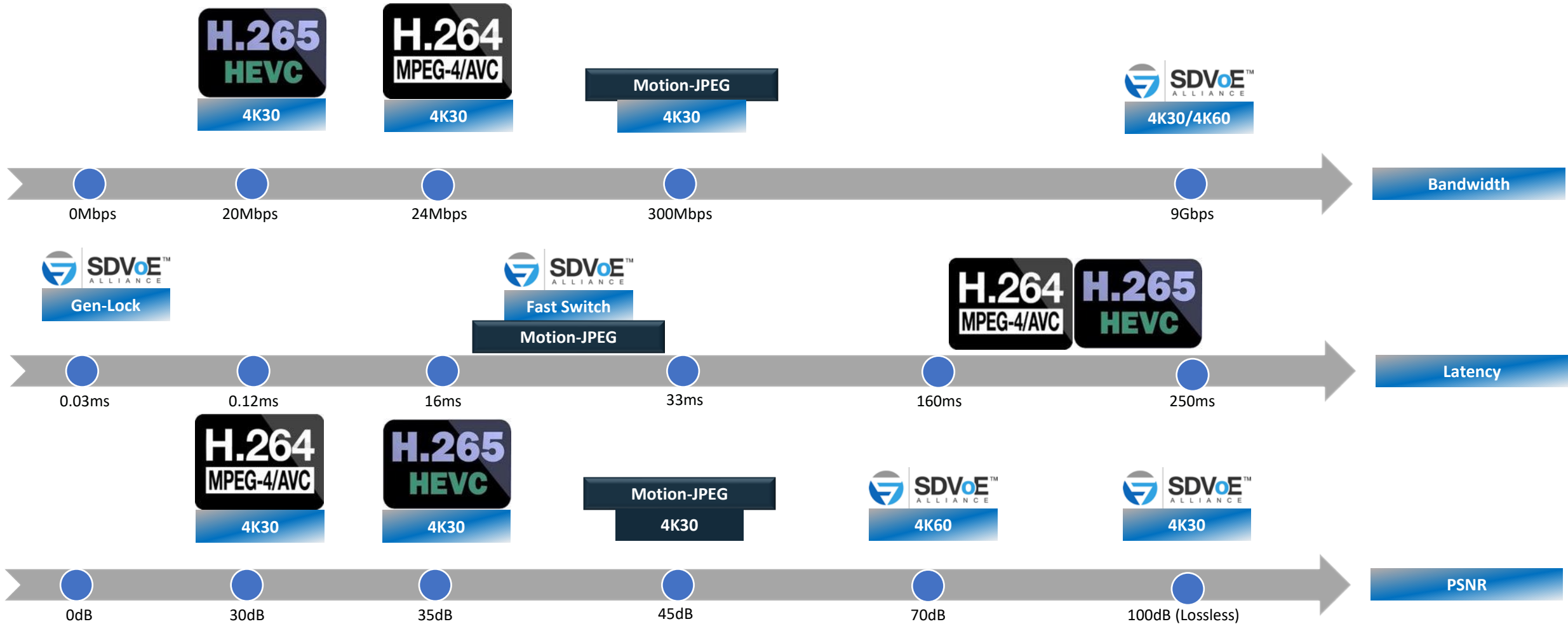
AV over IP Applications

AV Over IP provides a smart and flexible solution to transmit audio and video content by using standard, routable, Ethernet packets, following normal internet protocol rules.



AV over IP codec comparison

Various Codecs suited for different applications...



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/// IP-7000 Series (1G)

/// SDV Series Case Study: Zurich Opera

/// SDV Series (10G)

Case Study: Moretown Belle Sports Bar

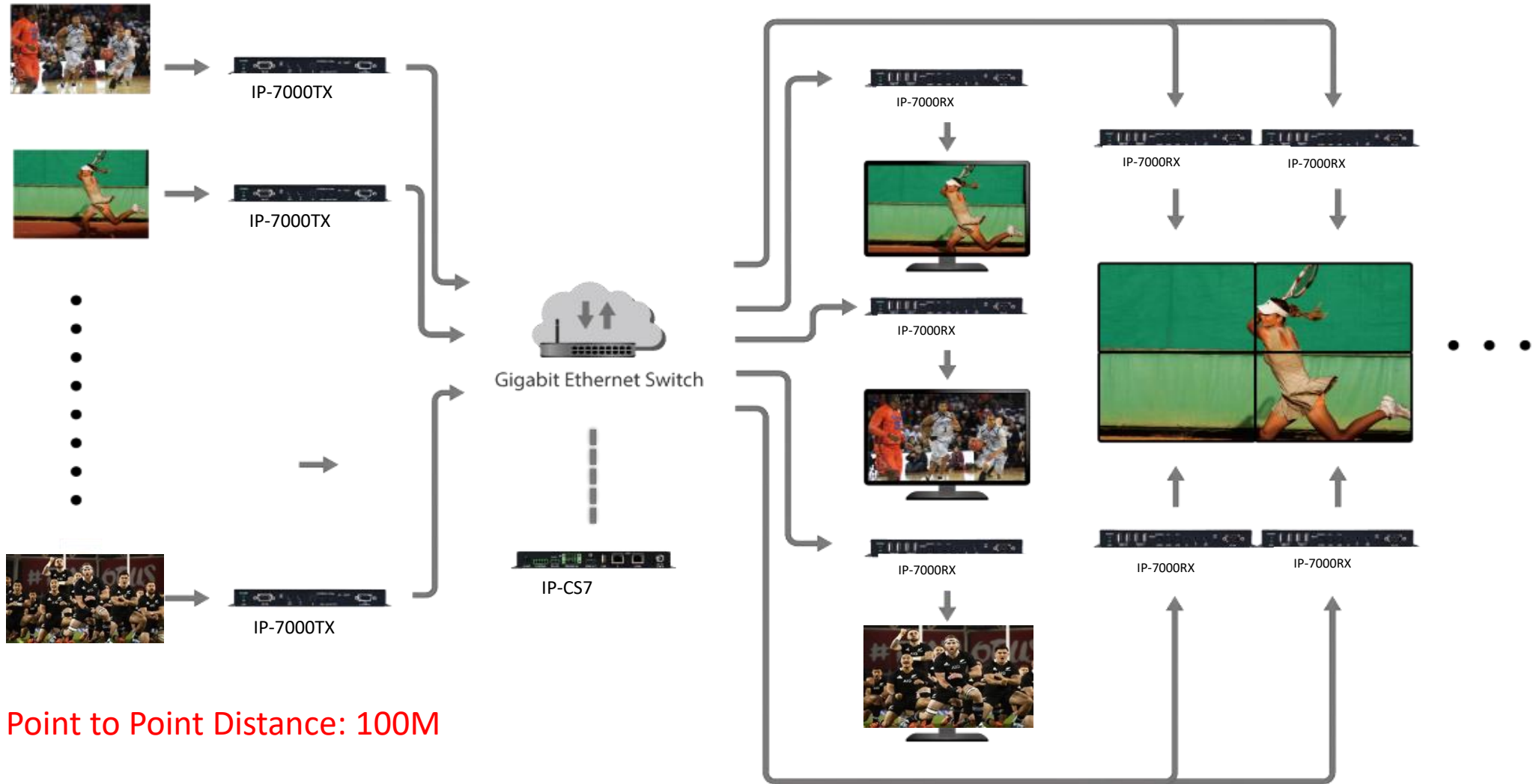


The Moretown Belle

Case Study: Moretown Belle Sports Bar



MoreTown Belle System Diagram



Point to Point Distance: 100M

Case Study - London's Moretown Belle (St Katharine's Dock)

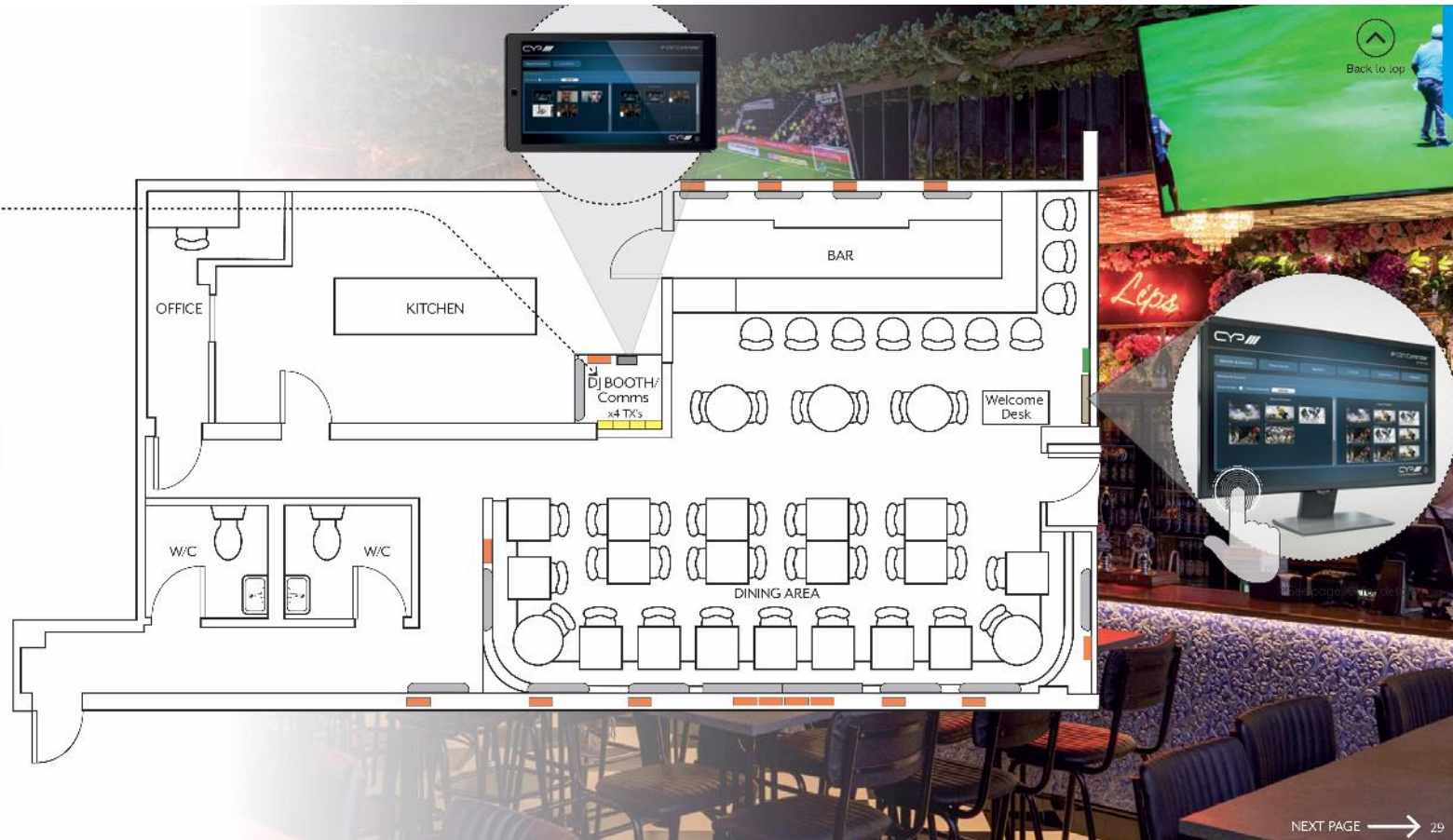
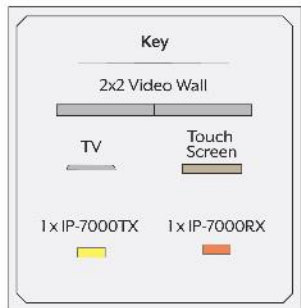
This facility is kitted out with a CYP AV over IP system, installed by AV Systems, featuring over 30 screens around the various seating areas, CYP's intuitive drag&drop control system operated by the staff, and various wall plate solutions for guests' devices.

IP Leisure/Bar Matrix System Solution

Benefits

- /// Direct connection to IP-CS7 from touch screen display
- /// Drag & drop user control
- /// Wizard setup
- /// Groups and preset configuration
- /// Flexible and scalable IP System
- /// PoE Power options
- /// Two way IR

If you can't find the solution you're looking for call our experienced technical support team on +44 (0) 20 3137 6690 for assistance



Case Study - London's Moretown Belle (St Katharine's Dock)

As customers enter the property, they are met by staff at the EPOS system. This system is accompanied by a touch screen display running the CYP control system (pictured below). This is running directly from the IP-CS7 controller. Staff can 'drag & drop' various Sky channels* to any location/area in the building.



Case Study - London's [Moretown Belle](#) (St Katharine's Dock)

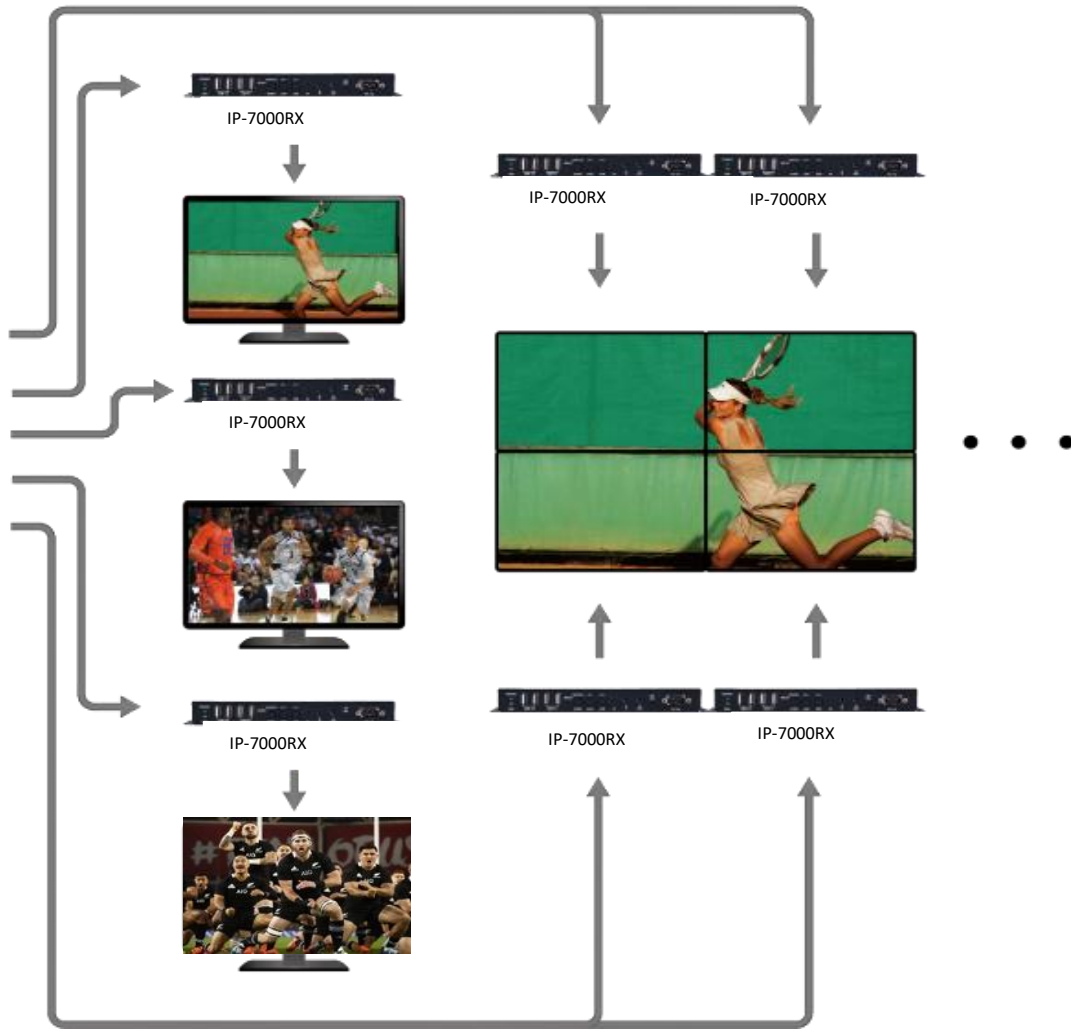
A CYP wall plate (HDMI/VGA) allows for additional sources (such as laptops) to be added into the system.



Video walls can be easily configured using the CS7 controller. (1x IP-7000RX per screen)



MoreTown Belle System Diagram



Simple video wall configuration

1x IP-7000RX per screen

Save as “video wall” group – drag source to “video wall”

Multiple user logins with admin rights

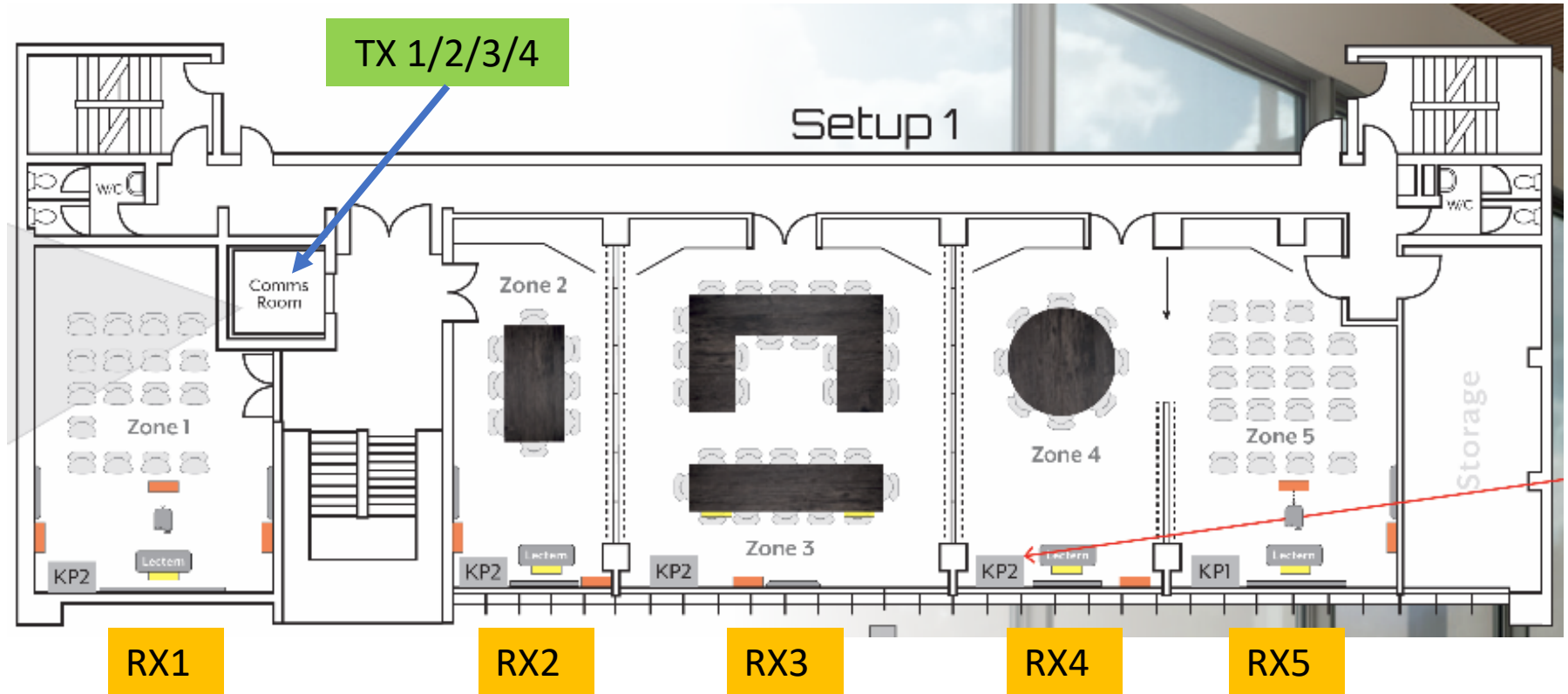
Allow or restrict access to TX, RX and settings options based on login used

Example 1;

Zone 1
 Login as: "Zone 1"
 Access to: TX1 and RX1
 No access to settings

Example 2;

Login as: "Admin"
 Access to: All TX, RX and settings



IP 7000 Controller GUI

Drag and Drop Interface



IP 7000 Controller GUI

The screenshot displays the IP 7000 Controller GUI. At the top left is the CYP logo. At the top right, it reads "IP CS7 Controller" with the IP address "192.168.0.39" below it. Below the header is a navigation bar with four tabs: "Monitor&Control" (selected), "Preset Recall", "Setting", and "Devices". The main content area is titled "Monitor & Control" and features an "Auto Refresh" toggle switch which is turned on. There are two preview panels: "Source Preview" and "Zone Preview". The "Source Preview" panel shows two thumbnails: "Pattern" (a color calibration chart) and "Laptop" (a Windows desktop background). The "Zone Preview" panel shows two thumbnails: "LG" (a Windows desktop background) and "Samsung" (a color calibration chart). At the bottom right of the interface, there is a CYP logo with the website "WWW.CYPEUROPE.COM" and a gear icon, all enclosed in a red and yellow border.

IP 7000 Controller GUI

The screenshot displays the IP 7000 Controller GUI. At the top left is the CYP logo. At the top right, it says "IP CS7 Controller" with the IP address "192.168.0.39" below it. A navigation bar contains four buttons: "Monitor&Control", "Preset Recall", "Setting", and "Devices". The "Monitor&Control" button is highlighted with a green rectangle. Below the navigation bar is the "Monitor & Control" section, which includes an "Auto Refresh" toggle switch. The main area is divided into two preview windows: "Source Preview" and "Zone Preview". The "Source Preview" window shows two thumbnails: "Pattern" (a color calibration chart) and "Laptop" (a Windows logo on a blue background). The "Zone Preview" window shows two thumbnails: "LG" (a Windows logo on a blue background) and "Samsung" (a color calibration chart). At the bottom right, there is a CYP logo with the website "WWW.CYPEUROPE.COM" and a gear icon.

IP 7000 Controller GUI

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IP 7000 Controller GUI

The screenshot shows the IP 7000 Controller GUI with the 'Devices' tab selected. The interface includes a top navigation bar with 'Monitor&Control', 'Preset Recall', 'Setting', and 'Devices'. Below this, the 'Devices' section contains 'Replace', 'Remove', and 'Sorting' buttons for both Transmitter and Receiver. The Transmitter section has a table with columns 'Hello', 'Name', and 'Info'. The Receiver section has a table with columns 'Hello', 'Name', and a multi-column selection area (All, Video, Audio, USB, IR, Serial, Info). A red box highlights the Receiver table.

Transmitter	Receiver																																				
<table border="1"><thead><tr><th>Hello</th><th>Name</th><th>Info</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/></td><td>Pattern</td><td>i ^</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Laptop</td><td>i</td></tr></tbody></table>	Hello	Name	Info	<input checked="" type="checkbox"/>	Pattern	i ^	<input checked="" type="checkbox"/>	Laptop	i	<table border="1"><thead><tr><th>Hello</th><th>Name</th><th>All</th><th>Video</th><th>Audio</th><th>USB</th><th>IR</th><th>Serial</th><th>Info</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/></td><td>LG</td><td>Laptop</td><td>Laptop</td><td>Laptop</td><td>Laptop</td><td>Laptop</td><td>Laptop</td><td>i ^</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Samsung</td><td>Pattern</td><td>Pattern</td><td>Pattern</td><td>Pattern</td><td>Pattern</td><td>Pattern</td><td>i</td></tr></tbody></table>	Hello	Name	All	Video	Audio	USB	IR	Serial	Info	<input checked="" type="checkbox"/>	LG	Laptop	Laptop	Laptop	Laptop	Laptop	Laptop	i ^	<input checked="" type="checkbox"/>	Samsung	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	i
Hello	Name	Info																																			
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Transmitter			Receiver								
Hello	Name	Info	Hello	Name	All	Video	Audio	USB	IR	Serial	Info
<input checked="" type="checkbox"/>	Pattern	<i>i</i> ^	<input checked="" type="checkbox"/>	LG	Laptop	Laptop	Laptop	Laptop	Laptop	Laptop	<i>i</i> ^
<input checked="" type="checkbox"/>	Laptop	<i>i</i>	<input checked="" type="checkbox"/>	Samsung	Pattern	Pattern	Pattern	Pattern	Pattern	Pattern	<i>i</i>

IP 7000 Controller GUI

Detail Settings

System

- Hello
- Name: LG
- Kernel Version: A7.3.1
- Application Version: V3.26C
- Reboot**
- Factory Default**

IP Setup

- MAC: F82285014786
- IP Mode: Auto IP
- IP Address: 169.254.4.234
- Subnet Mask: 255.255.0.0
- Gateway: 169.254.0.254

Video Over IP

- Enable Video Over IP
- Channel: 1
- Casting Mode: Multicast
- Scaler Output Mode: Pass-Through
- Copy EDID From This Video Output
- Turn Off Screen On Video Loss
- Timeout For Detecting Video Loss: 10 Seconds
- Video Select Lock for Device Button
- Video Channel Lock for Device Button

Serial Over IP

- Enable Serial Over IP
- Baudrate: 115200
- Data bits: 8
- Parity: None
- Stop bits: 1

USB Over IP

- Enable USB Over IP
- Operation Mode: Auto Select Mode
- Compatibility Mode:
 - K/M over IP

Video Wall

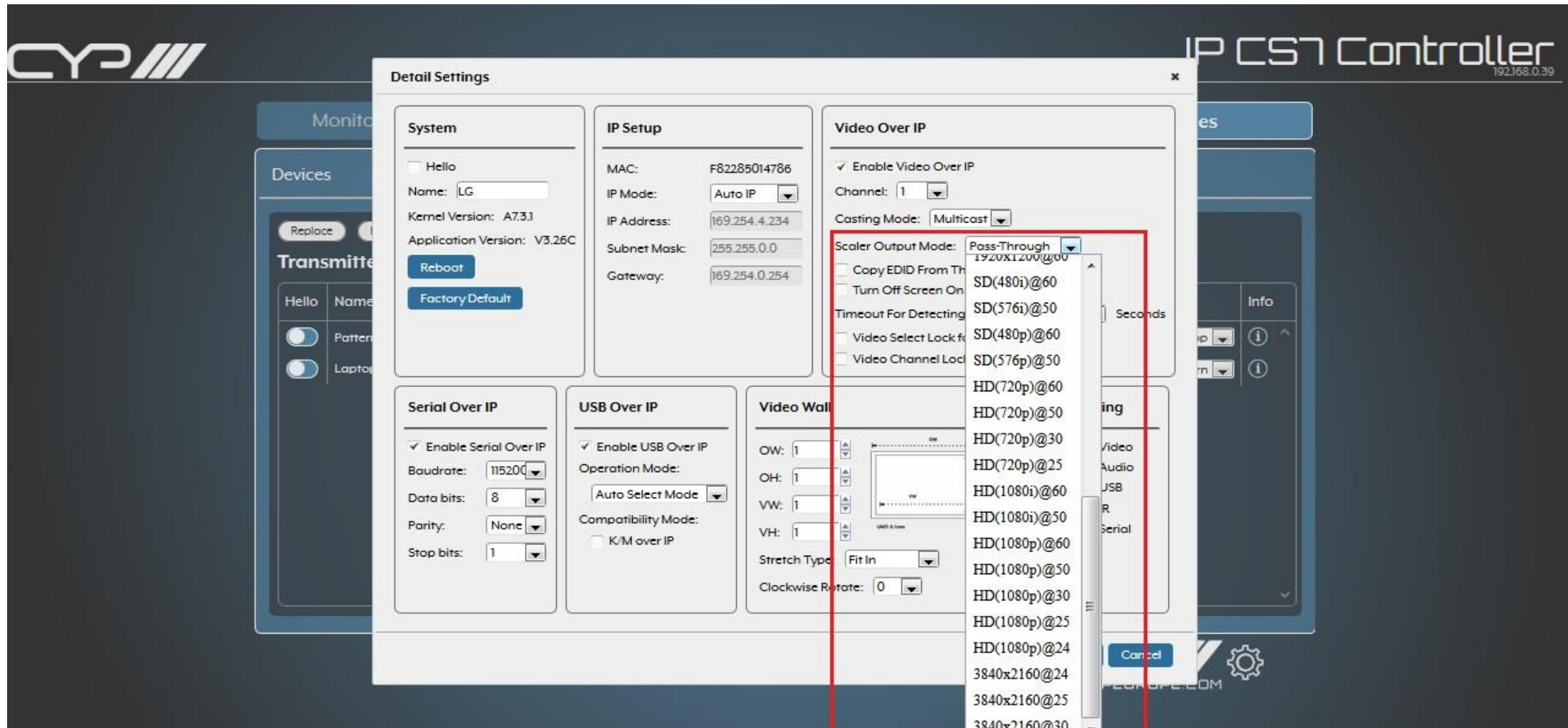
- OW: 1
- OH: 1
- VW: 1
- VH: 1
- Stretch Type: Fit In
- Clockwise Rotate: 0

Free Routing

- Enable Video
- Enable Audio
- Enable USB
- Enable IR
- Enable Serial

Confirm **Cancel**

IP 7000 Controller GUI



IP 7000 Controller GUI

Detail Settings

System

Hello

Name:

Kernel Version: A7.3.1

Application Version: V3.26C

IP Setup

MAC: F82285014790

IP Mode:

IP Address:

Subnet Mask:

Gateway:

Video Over IP

Channel:

Casting Mode:

Switch Mode:

Maximum Bit Rate:

Maximum Frame Rate: %

Serial Over IP

Baudrate:

Data bits:

Parity:

Stop bits:

USB Over IP

Operation Mode:

Compatibility Mode:

Mouse not responding well

K/M over IP

IP CS7 Controller 192.168.0.39

WWW.CYPEUROPE.COM

IP 7000 Controller GUI



IP CS7 Controller
192.168.0.39

Monitor&Control

Preset Recall

Setting

Devices

System Setting

LAN1

MAC F8:22:85:01:2C:DD
IP Mode Auto IP
IP Address 169.154.130.49
Subnet Mask 255.255.0.0
Gateway

Save

LAN2

MAC F8:22:85:01:2C:DE
IP Mode DHCP
IP Address 192.168.0.39
Subnet Mask 255.255.255.0
Gateway 192.168.0.1

Save

Login

Logout

Change Password

Factory Default

Reboot

Restart Screen

Wizard

User

- Clean history table.
- Redirect to wizard setting page.

Download Logfile

S/N:

Firmware Upgrade

IP CS7 Controller

Version: V214

Transmitter

Number of devices: 2

Receiver

Number of devices: 2

Browse... No file selected.

Upgrade All

Advanced...

Settings Download

Download

Settings Upload

Browse... No file selected.

Upload

Favicon (.ico)

Browse... No file selected.

Upload

Logo (.png)

Browse... No file selected.

Upload



IP 7000 Controller GUI

System Setting

LAN1

MAC: F8-22-85-01-2C-DD

IP Mode: Auto IP

IP Address: 169.254.130.49

Subnet Mask: 255.255.0.0

Gateway:

Save

LAN2

MAC: F8-22-85-01-2C-DE

IP Mode: DHCP

IP Address: 192.168.0.39

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Save

- **Dual LAN**

- LAN 1: Connect to your dedicated IP system network switch hardware. PoE supported.
- LAN 2: Connect to your wider IP network for integration and control.

Moretown Belle Server Cabinet



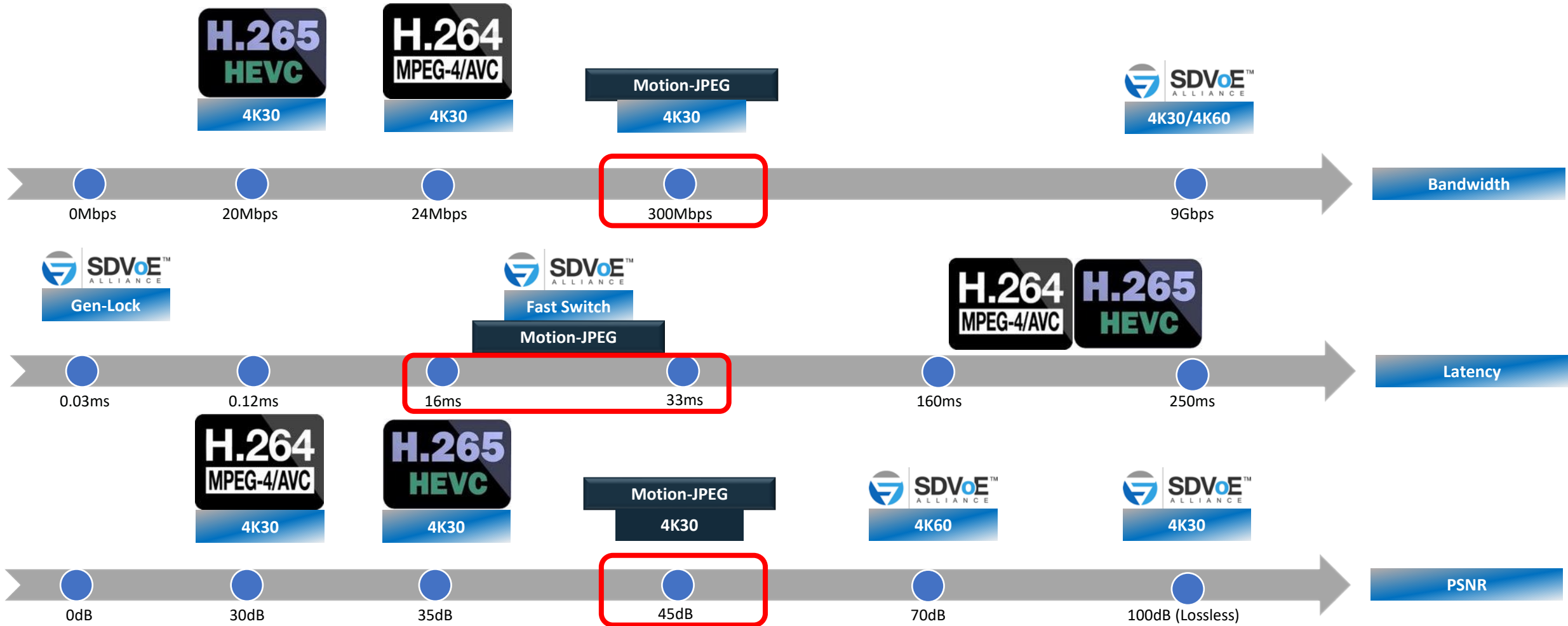
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/// IP-7000 Series (1G)

AV over IP codec comparison



Why IP 7000 Series



Key Features:

- /// Flexibility and Scalability
- /// IP-CS7 Control System (Drag and Drop Interface)
- /// Simplicity (Setup Wizard)

IP 7000 Series (1G)



	IP-7000TX (HDMI 1.4)		IP-7000RX (HDMI 1.4)	
Video	HDMI IN	Bandwidth 10.2Gbps	HDMI OUT	Bandwidth 10.2Gbps
	VGA IN + VGA loopback for monitor		VGA OUT	Mirror out from HDMI
LAN	Giga Ethernet	Support PoE-PD	Giga Ethernet x 3	LAN1 support PoE-PD
USB	USB 2.0 type B		USB 2.0 type A x 2	
			USB 1.1 type A x 2	
RS-232	D-SUB 9		D-SUB 9	
IR	IN, OUT		IN, OUT and Local Window IN	
Audio	LINE IN, OUT		MIC IN, LINE OUT, OPTICAL OUT	

IP 7000 Controller



	IP-CS7	
Video	HDMI OUT	1080P @ 60Hz
LAN1	Giga Ethernet	Support PoE-PD
LAN2	Giga Ethernet	For control only
USB	USB 2.0 type A for keyboard and mouse control	
RS-232	3Pin Terminal Block	
IR	IN and local window IN	
Trigger	10Pin Terminal Block with 8 port trigger IN	

AV over IP

CYP YouTube videos



[HDMI over IP - Learn more about our IP Solutions](#)



[HDMI over IP - Learn more about the IP-CS7 Control System](#)

Thank you

 daniel.branton@cypeurope.com