

Control Your Video

VIDEO WALLS VIDEO PROCESSORS VIDEO MATRIX SWITCHES EXTENDERS SPLITTERS WIRELESS CABLES & ACCESSORIES

H.264 IP CAPTURE TO HDMI ENCODER/ DECODER WITH TELNET AND AUDIO SUPPORT



© 2017 Avenview Inc. All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and claims any express or implied warranty, relating to its products are is strictly prohibited.

Product Application & Market Sectors



Corporate



House Of Worship



Military



Residential



Education



Industrial



Medical



Aviation



TABLE OF CONTENTS

١.	GETTING STARTEDI
1.1	IMPORTANT SAFE GUARDSI
1.2	SAFETYINSTRUCTIONSI
1.3	REGULATORY NOTICES FEDERAL COMMUNICATIONS COMMISIION (FCC)
2.	INTRODUCTION
2.1	PACKAGE CONTENTS
2.2	BEFORE INSTALLATION
2.3	APPLICATION DIAGRAM
2.4	PANEI DESCRIPTION
	2.4.1 FRONT PANEL (ENCODER, TRANSMITTER)
	2.4.2 REAR PANEL (ENCODER, TRANSMITTER)
	2.5.1 FRONT PANEL (DECODER, RECEIVER)
	2.5.2 REAR PANEL (DECODER, RECEIVER)
3.	INSTALLATION (HDM-XTRM-IP)
3.1 1	NETWORK SWITCH CONFIGURATION8
3.2	DECODING USING PC SOFTWARE9
3.3	CHANGING STREAM TYPE AND MODE9
4. SI	ETTING A STATIC IP ON COMPUTER
5. C	CONNECTING TO HDM-XTRM-IP
6. D	ECODING WITH HARDWARE DECODER
7. S	PECIFICATIONS

SECTION I: GETTING STARTED

I.I IMPORTANT SAFE GUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
- Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
- Repair or attempted repair by anyone not authorized by us.
- Any damage of the product due to shipment.
- Removal or installation of the product.
- External causes to the product, such as electric power fluctuation or failure.
- u se of supplies or parts not meeting our specifications.
- Normal wear and tear.
- Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

I.2 SAFETY INSTRUCTIONS

The Avenview HDM-XTRM-IP H.264 IP stream Encoder/Decoder has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the HDM-XTRM-IP should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- A Do not dismantle the housing or modify the module.
- ▲ Dismantling the housing or modifying the module may result in electrical shock or burn.
- A Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- 🔥 keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- 🔥 Have the module checked by a qualified service engineer before using it again.
- 🔥 Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

I.3 REGULATORY NOTICES FEDERAL COMMUNICATIONS COMMISSION (FCC)

This equipment has been tested and found to comply with part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

ny changes or modifications made t	o this equipment may void the us	ser's authority to operate this equipment
------------------------------------	----------------------------------	---

Warning symbols	Description
	ONIY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAI PARTS. THIS MAY RESULT IN EI ECTRICAL SHOCK OR BURN.
\bigcirc	DO NOT TAMPER WITH THE UNIT. DOING SO WIII VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT
BEWARE this unit contains static sensitive devices	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.



Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.

2. INTRODUCTION

The Avenview HDM-XTRM-IP-SET, HDMI H.264 IP stream Encoder/Decoder delivers end-to-end streaming media over IP networks. The HDM-XTRM-IP-SET is a total architecture based on the TCP/IP protocol family. This device is engineered to deliver A/V signal over WAN or LAN, video extension -with the help of matching network equipments- can be achieved over several thousands of km's

FEATURES:

- H.264 video decoder;
- Transmits audio and video from ethernet port to HDMI;
- Streams media through LAN or WAN;
- Input Resolutions: From 640x480@60Hz to 1080p@24/25/30/50/60Hz;
- Can be used using the Encoder only with Avenview PC decoding software over IP;
- Receive TS data with unicast or multicast method;
- Supports RTSP protocol;
- Output Resolution: From 640x480@60Hz to 1080p@24/25/30/50/60Hz;
- Supports audio format including LPCM or AAC standard;
- Displays can be controlled using RS-232 or CEC;
- Telnet CLI and Web UI supported;
- Supports static IP, DHCP and AutoIP;
- Video Bitrate: 2m~30Mbps;
- AAC Audio Bitrate: 32~240Kbps;
- LPCM Audio Bitrate: 1.6Mbps;
- Supports video timing up to 1920x1080@60Hz and 1920x1200@60Hz;
- Low Latency Mode: 120ms end-to-end latency.





2.1 PACKAGE CONTENTS

Before you start the installation of the HDMI Extender, please check the package contents.

I	HDM-XTRM-IP XI	
2	Power Adapter (+ 12V DC 1A) + International Adapters XI	
3	I x Right and Left Ear Rack Sets X2	
4	User Guide X	

2.2 **BEFORE INSTALLATION**

- put the product in a level and stable location. If the product falls, it may cause damage or malfunction to components within the casing.
- Do not place the product in temperatures under 0°C or over 50°C. High humidity may also cause the unit to malfunction.
- u se the DC power adapter with correct specifications supplied with the unit. If the improper power supply is used, this may result in malfunction of the unit and may cause fire.
- Do not twist or pull by force the ends of the UTP cable. It will cause malfunction.



HDM-XTRM-IPS

APPLICATION DIAGRAM I







2.4 PANEL DESCRIPTION (ENCODER/TRANSMITTER)

2.4.1 FRONT PANEL



- I. Power LED: Indicates if the unit is powered OFF or ON by a RED LED
- 2. Status LED: Steady Blue Light ON indicates unit is communicating properly. LED blinking waiting on Source

2.4.2 REAR PANEL



- I. POWER JACK: 12V DC Power Jack.
- 2. RESET: Reset device to factory default.
- 3. HDMI IN: Connect to HDMI/DVI Source.
- 4. LAN: Used for send video/audio streams to Decoder or over the network.



2.5 PANEL DESCRIPTION (DECODER/RECEIVER)

2.5.1 FRONT PANEL



- I. Power LED: Indicates if the unit is powered OFF or ON by a RED LED
- 2. Status LED: Steady Blue Light ON indicates unit is communicating properly. LED blinking waiting on Source

2.5.2 REAR PANEL



- I. POWER JACK: 12V DC Power Jack.
- 2. LAN: Used to receive video/audio streams to from Encoder.
- 3. HDMI OUT: Connect to display/TV.
- 4. AUDIO OUT: Connects to an audio output device such as an amplifier for audio de-embedding.
- 5. RS-232: RS-232 Data pass-through port for receiving /sending commands to RS 232 device.



3. INSTALLATION (HDM-XTRM-SET)

To setup Avenview HDM-XTRM-SETplease follow the following steps:

- I. Turn off all devices including monitors / TV.
- 2. Connect an HDMI source (such as a Blu-Ray Disc player or PC) to the Encoder HDM-XTRM-IPS.
- ^{3.} Connect CAT5/6 from Encoder to exisitng network or the network switch.
- 4. Download the compatible video player software on PC. (Player that support live netwrok IP streaming)
- 5. Power on all devices and follow the instructions on how to start IP streaming.

NOTE: For network setup please see the Network switch configuration guide and Network Connection guide to acheive best results.

3.1 NETWORK SWITCH CONFIGURATION

Power on the switch and change configurations following the steps below*:

- 1. If your switch is supplied with our products, it has been configured correctly and passed our tests. Therefore, it can be used without any configuration.
- 2. If we do not provide any switch with our products or you want to use other switches, we would recommend that you use a switch tested by us and configure it by following our instructions.
- 3. If you use a switch which is not tested by us, configure it by referring to the following requirements.
 - Disable green or energy-saving feature
 - Enable Multicast forwarding or filtering
 - Enable IGMP Snooping
 - Assign a valid IP address to the IGMP Querier
 - Enable IGMP Querier
 - Enable IGMP fast leave
 - Disable dynamic multicast router port
 - Disable forwarding unknown multicast

All related settings above must be configured in global configuration and VLAN configuration. For more detailed information on configuring the network switch please check netwrok guide at: http://www.avenview.com/images/manuals/Avenview%20HDM-C6MXIP-SET%20NetworK_Switch%20%20Cisco%20rv01.pdf

* Menu configuration might differ depending on the netwrok switch used.



3.2 DECODING USING PC SOFTWARE

- I. Power on source device, encoder and PC.
- 2. Configure your PC's network settings with IP address 192.168.1.11 and subnet mask 255.255.0.0, leaving gateway and DNS blank.
- 3. Launch Avenview media player.
- 4. In the menu bar, select Media -> Open Network Stream, input rtp://@226.1.1.1:12345, then click Play.
- 5. The software will start playing the video content of the source device.
- 6. Configure the encoder to alter the encapsulation and transmission mode of the media stream, and control the Avenview media player to play the media stream with the corresponding parameter.

3.3 CHANGING STREAM TYPE AND MODE

The default stream type is TS over UDP, to use other stream type and mode follow below steps:

- I. Launch a web browser in your PC and type in 192.168.10.254 in the address bar;
- 2. In the displayed login dialog box, enter the default password admin;
- 3. In the Functions page, expand the Stream section;
- 4. For the item Transport type, set its value to tsoverudp, then click Apply;
- 5. For the item Dest IP address, set its value to 192.168.1.11, namely, the IP address of your PC, then click Apply;
- 6. Launch Avenview media player, in the menu bar select Media -> Open Network Stream, input udp://@:12345, then click Play. Notice:

The URL assigned to Avenview Media Player depends on the configurations, stream type and Destination IP address, please refer to the following details:

Transport type	Dest IP address	URL for VLC
tsoverrtp	226.1.1.1	rtp://@226.1.1.1:12345
tsoverudp	226.1.1.1	udp://@226.1.1.1:12345
tsoverrtp	192.168.1.11	rtp://@:12345
tsoverudp	(PC's IP address)	udp://@:12345



4. Setting a Static IP on Computer

Before logging into the HDM-XTRM-IP devices, please ensure all devices are in the same network segment. To verify and properly control the devices, please set a static IP on your computer. See the instructions below for more details. The Encoder and Decoder units are pre-configured with AutoIP. Upon connecting the units to a stand alone network switch (without router attached), the units will be on IP address range at 192.168.1.11 and subnet mask 255.255.0.0. Set your computer's IP address as 192.168.X.X and subnet mask as 255.255.0.0. A Windows 7 PC/Laptop is used as an example to configure a static IP address.

- I. Click Start.
- 2. Choose Control Panel > Network and Internet > Network and Sharing Center > Change Adapter Settings, right click Local Area Connection, and then choose Properties.





3. Select Internet Protocol Version 4 (TCP/IPv4) and click Properties

Local Area Connection Properties
Networking Sharing
Connect using:
Realtek PCIe GBE Family Controller
<u>C</u> onfigure
This connection uses the following items:
Client for Microsoft Networks QoS Packet Scheduler File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 9 (TCP/IPv4)
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

- 4. Select **Use the following IP address**. After configuring the settings in the following example, click **OK**.
 - > IP address: 192.168.1.11
 - > Subnet mask: 255.255.0.0

Internet Protocol Version 4 (TCP/IPv4)	Properties	? X
General		
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	atically if your network ask your network adm	supports inistrator
Obtain an IP address automatical	у	
Use the following IP address:		
IP address:	192 . 168 . 1 . 1	1
Subnet mask:	255.255.0.0	
Default gateway:		
Obtain DNS server address autom	atically	
Use the following DNS server address of the server address of t	esses:	
Preferred DNS server:		
Alternate DNS server:		
Vaļidate settings upon exit	Ad	vanced
	ОК	Cancel

5. Click OK.



5. CONNECTING TO HDM-XTRM-IP

I. Log in into HDM-XTRM-IP by entering the default IP address: 192.168.10.254 into a web browser

Login
Password:
Commentation

2. Enter default Password: 12345

← → C ① Not secure | 192.168.10.254

← → C ③ Not secure | 192.168.10.254

* 🖪 🤨 :

☆ 📕 💷 🗄

Password:	Login
	-Romomber Dasses



- 3. "Video" submenu allows:
 - Change HDCP
 - Change Bitrate
 - Change Output Resolution

← → C ① 192.168.10.254				☆ 🗵 🔨 :
ſ	Functions System		Logour	
	Input HDCP support	Enable		
			Apply	
	Encoder			
	Max bitrate (kbps)	6000	2000,30000]kbps	
	Output Resolution	auto		
			Apply	
	+ Audio			
	+ TS Parameter			
	+ Stream			
	Event Log (last 100 entries only)			
	09:31:34 Receive IP info={"ipinfo":{["ipmode":"static","ip4addr:"19	92.168.10.254","netmask"."255.255.0.0","gateway"."0.0.0.0"]]}		
	09:31:34 get IP info			
	09:31:34 model=IPS3000 version=v1.1.1 buildTime=Fri, 01 Jul 2	016 02:20:03 +0000		
	09:31:34 Receive version info={"versioninfo";[{"Model";"IPS3000"	","Version"."V1.1.1","BuildTime"."Fri, 01 Jul 2016 02:20:03 +0000")	9	
	09:31:34 xml rootNode name=Config			
	09:31:34 Receive config Info			
	00.04.04 automaina infe			•

4. Main page interface includes "Functions" and "System" tabs.





5. "Audio" settings allow to choose the encoder Audio "Type" and "Bitrate"

				☆ 🛃
Functions	s System		Logout	
+ Vide	20			
- Audi	lio			
E	ncoder			
	Encode Type	àac		
			Apply	
	AAC Param			
	Encode bitrate (kbps)	240		
			Apply	
+ TS P:	Parameter			
+ Strea	am			
Event Log	g (last 100 entries only)			
09:31:34 R	Receive IP info={"ipinfo" {{"ipmode"."static", "ip4addr": "192	168.10.254","netmask":"255.255.0.0","gateway":"0.0.0.0")]}		
09:31:34 ge	get IP Info			
09:31:34 m	nodel=IPS3000 version=v1.1.1 buildTime=Fri, 01 Jul 201	6 02:20:03 +0000		
09:31:34 R	Receive version info=("versioninfo" {{"Model": "IPS3000", "	/ersion":"v1.1.1","BuildTime":"Fri, 01 Jul 2016 02:20:03 +0000")]}		
09:31:34 xr	ml rootNode name=Config		1	
	Receive config info			
09:31:34 R				

6. "Thiele/Small parameters" Allows changing the specified low frequency performance of a loudspeaker driver

← → C ③ 192.168.10.254		☆ 🖪 💷 :
	Functions System Logout	
	+ Video	
	+ Audio	
	- TS Parameter	
	Program number 1 [1,65535]	
	Apply	
	+ Stream	
	Event Log (last 100 entries only)	
	093134 Receive IP Info=[TipInfo"{[TipInfo"{[TipInfo"][Ti	
	09:31:34 get IP info	
	09;31:34 model=IPS3000 version=v1.1.1 buildTime=Fri, 01 Jui 2018 02:20:03 +0000	
	09/31/34 Receive version info={"versioninfo"}{"Model"?!P83000"; Version"?v1.1.1";"BuildTime";"Eri, 01 Jul 2016 02:20:03 +0000"}))	
	09/31/34 xml rootNode name#Config	
	09.31:34 Receive config info	
	09:31:34 get version into	



7. "Stream" settings allows:

- Enable or Disable Streaming
- Change "Transport Type"
- Change "IP Address"
- Change "Port"

	- o x
	x 🖬 G :
Functions System	Logour
+ Video	
+ Audio	
- Stream	
Stream enable	Enable
Transport type	tsoverrtp
Dest IP address	226.1.1.1
Dest port	[12345 [1025, 65534]
	Apply
Event Log (last 100 entries only)	
09.31:34 Receive IP info=Clpinfo".V"pmode":"static"."	addr"1192 168 10 254", "netmask" "255 255 0.0" "gateway" "0.0.0.0"]]
09/31/34 net IP info	
002124 model=ID22000 uppigs=u1.1.1 huid/Time=E	01 01 2016 02 20 02 4000
08.31.34 IND061-IP 33000 VEISION-V1.1.1 DUNOTING-P	01.301.2010.02.2003.50000
09:31:34 Receive version info=("versioninfo")("Model	2S3000","Version":"V1.1.1","BuildTime":"Fn, 01 Jul 2018 02:20:03 +0000")]}
09:31:34 xml rootNode name=Config	
09/31/34 Receive config info	
out of the only mo	

8. "Transport Type" can be switched between: User datagram Protocol (UDP) and Real-time transport protocol (RTP)

-341822802848 ×			Init - B
③ 192.168.10.254			☆ 🖪 🤤
	Functions System	Logout	
	+ Midaa		
	+ Audio		
	+ TS Parameter		
	- Stream		
	Stream enable	Enable	
	Transport type	tsoverrtp	
	Dest IP address	zooliti	
	Dest port	12345	
		Apply	
	Event Log (last 100 entries only)		
	09:31:34 Receive IP Info=("lpinfo" (("lpmode" "static", "lp4addr"	""192.168.10.254","netmask":"255.255.0.0","gateway""0.0.0.0")]}	
	09:31:34 get IP info		
	09:31:34 model=IPS3000 version=v1.1.1 buildTime=Fri, 01 Ju	ul 2016 02:20:03 +0000	
	09:31:34 Receive version info+Cversioninfo"//7/lodel*/1PS30	000" "Version" "v1.1.1" "BuildTime" "En. 01 Jul 2016 02:20:03 +0000"/8	
	00.21.24 yml rodiliodo pama-Confin		
	20.24.24 Development late		
	vestion receive compilitio		
	09:31:34 get version into		



- 9. "System" allows:
 - Change device name
 - Change IP Mode, Subnet mask, Gateway
 - Change Password
 - Change Background Picture

← → C ① Not secure 192.168.10.254				x 🛛 🖉
	Functions System		Legout	
	Device Name			
	Device Name	IPS3000-341B22802B98		
	Note: The device name must be 1~20 characters in le	ngth(letters numbers '_' or '-').	Apply	
	Network			
	IP Mode	Static		
	IP Address	192.168.10.254		
	Netmask	255 255 0.0		
	Cateway	0.0.0.0		
	Note: After pressing Apply, please reboot the device	for settings to take effect.	Apply	
	Password			
	New Password			
	Note: Password must be 4 to 16 characters in length	alphanumeric only.	Apply	
	Idle pattern picture			
	File:	Browse		
	Note: You must upload an image in bmp format that has 1920 a	t 1080 pixels. Upload		

10. Cont'd "System" allows:

- Check Device Firmware Information
- Command control and Reboot
- Event Log

← → ♂ ③ Not secure | 192.168.10.254

		* 🖪 🤇
Upgrade		
File:	ef and	
Note: The system will be reported after upgrading miss	жи. Африу	
Version info		
Model	IP\$3000	
Version	1.1.1v	
Build Time	Fri, 01 Jul 2016 02:20:03 +0000	
Commands	Revet To Eactory Default	
vent Log (last 100 entries only)		
31:34 Receive IP info=("ipinfo".[("ipmode":"static","ip4addr":	"192.168.10.254","hetmask":"255.255.0.0","gateway":"0.0.0.0"}}	
31:34 get IP info		
31.34 model=IPS3000 version=v1.1.1 build lime=Pri, 01.30		
21:24 Receive vertice into-Duetointe*[[Medel: 182200		
31:34 Receive version info={"versioninfo":{"Model":"IPS300 31:34 xmi rontNode name=Config	0 , version . v1.1.1 , build lime . FN, 01 30/2018 02:20:03 *0000 /p	
(31:34 Receive version info=("versioninfo")("Model"."IPS300 (31:34 xml rootNode name=Config 31:34 Receive config info	V, version , v1,1,1, build lime , rii,01 du 2010 02 20 03 70000 <u>yp</u>	



6. DECODING WITH HARDWARE DECODER

Hardware decoder is optional and provides an alternative way to stream over IP without using a PC or video streaming softwares, please refer

to HDM-XTRM-IPR guide for more information.



7. SPECIFICATIONS

ltem	Description		
Units	HDM-XTRM-IP-S		
Unit Description	HDMI Transmitter/Encoder		
Input Video Port	I x HDMI IN		
Input Video Type	HDMI I.4, DVI I.0		
Input Resolution	HDMI:		
	640 x480@60Hz, 480i@60Hz 480p@60Hz, 576i@50Hz,576P@50Hz, 800 x600@60Hz, 1024 x768@60Hz, 720p@50Hz,720p@60Hz, 1280 x 800@60Hz,1280 x1024@60Hz, 1360 x 768@60Hz,1366 x 768@60Hz, 1400 x 1050@60Hz,1440 x900@60Hz, 1680 x1050@60Hz, 1080i@50Hz,1080i@60Hz, 1080p@24Hz,1080p@25Hz,1080p@30Hz, 1080p@50Hz,1080p@60Hz,		
	DVI:		
	640 x480@60Hz, 480i@60Hz, 480p@60Hz, 576i@50Hz,576P@50Hz, 800 x 600@60Hz, 1024 x768@60Hz, 720p@50Hz,720p@60Hz, 1280 x 800@60Hz,1280 x1024@60Hz, 1360 x 768@60Hz,1366 x 768@60Hz, 1360 x 768@60Hz,1366 x 768@60Hz, 1400 x 1050@60Hz,1440 x 900@60Hz, 1680 x 1050@60Hz, 1080i@50Hz,1080i @60Hz, 1080p@24Hz, 1080p@25Hz,1080p@30Hz, 1080p@50Hz, 1080p@60Hz, 1920 x 1200@60Hz		
	VGA:		
	640 x 480@60Hz, 800 x 600@60Hz 1024 x 768@60Hz, 1280 x1024@60Hz 1280 x720@60Hz, 1280 x 768@60Hz, 1280 x 800@60Hz, 1360 x 768@60Hz,1366 x 768@60Hz, 1440 x 900@60Hz		



	400 x 1050@60Hz 680 x1050@60Hz, 920 x1080@60Hz, 920 x 1200@60Hz YPbPr: 720 x 480i@60Hz,720 x 480p@60Hz, 720 x 576i@50Hz,720 x 576P@50Hz, 280 x720p@50Hz,1280x720p@60Hz 920 x1080i@50Hz,1920 x 1080i@60Hz CVBS: 480i@60Hz,576i@50Hz		
Input Video Signal	0.5~I.2 V p-p		
Encoding Data Rate	Up to 30 Mbps, configurable		
Output Video Ports	I x CAT5/6		
Output Video Type	H.264/MPEG-4 AVC		
Output Video Resolutions	Large IP stream: Resolutions 480p@60Hz~1920 x 1200@60Hz Small IP stream: 352x288@5Hz		
Video Impedence	100 Ω		
Input DDC Signal	5 V p-p (TTL)		
End-to-End Time Latency	About 60ms-90ms (Low latency mode) About 250ms-300ms (High quality mode)		
Input Audio Ports	HDMI		
Input Audio Format	Audio embedded in streaming media input		
Output Audio Format	Stereo		
Control Method	Rear panel CAT5/6 port, PC configurator and RS-232		
Power Supply	I2VIADC		
Power Consumption	6W (Max.)		
Shipping Dimensions	I 2.2" L x 3.0" H x 7.1" D		
Product Dimensions	9.3" L x 1.0" H x 3.7" D		
Weight	3 lbs		
ESD Protection	Human body model: -±8kV (air-gap discharge) -±4kV (contact discharge)		
Environmental			
OPERATING TEMPERATURE	32° ~ 104°F (0° to 40°C)		
STORAGE TEMPERATURE	$-4^{\circ} \sim 140^{\circ} F (-20^{\circ} \sim 60^{\circ} C)$		

RELATIVE HUMIDITY

20~90% RH (no condensation)

- All HDMI over CATx transmission distances are measured using Belden CAT6A (625MHz), 4-Pair,UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented Double-H spline, Ripcord, PVC Jacket using Quantum 980 signal HDMI Video Generator Module with Video Pattern Testing and shielded ends.
- 2. The transmission length is largely affected by the type of category cables, also the type of HDMI sources, and the type of HDMI display. The testing result shows solid UTP cables (usually in the form of 300m or 1000ft bulk cable) can transmit a lot longer signals than stranded UTP cables (usually in the form of patch cords). Shielded STP connectors are better suit than unshielded UTP connectors. A solid UTP CAT6A cable shows longer transmission length than solid UTP CAT5E/6E cable.
- 3. EIA/TIA-568-B termination (T568B) for category cables is recommended.
- 4. To reduce the interference among the unshielded twisted pairs of wires in category cable, you can use shielded STP cables with shielded connector to improve EMI problems, which occurs in poor wiring environments with unplanned cable runs situated away from EMI interference.
- 5. Because the quality of the category cables has the major effects in how long transmission distance will be made and how good is the received signal on the display, the actual transmission length is subject to high quality category cables. For resolution greater than 1080i or 1280x1024, a solid CAT6E 250MHz cable is the only viable choice.

	Data Link TIA/EIA-568-B			
PIN	Color	Function		
1	● ₩-0	TX0-		
2	• •	TX0+		
3	🐑 W-G	TX1-		
4	📁 BL	TX2-		
5	W-BL	TX2+		
6	🗊 G	TX1+		
7	W-BR	TXC-		
8	e BR	TXC+		



PERFORMANCE GUIDE FOR HDMI OVER CATEGORY CABLE TRANSMISSION

PERFORMANCE RATING		TYPE OF CATEGORY CABLE			
WIRING	SHIELDING	CAT5	CAT5E	CAT6	
SOLID	u NSHIEI DED (u Tp)	***	****	****	
	SHIEI DED (STp)	***	****	****	
STRANDED	u NSHIEI DED (u Tp)	*	**	**	
	SHIEI DED (STp)	*	*	**	
TERMINATION		PLEASE USE EIA/TIA-568-B TERMINATION (T568B) AT ANY TIME			









Control Your Video

TECHNICAL SUPPORT

CONTACT US



Phone: I (866) 508 0269

Email: support@avenview.com

Avenview Canada

151 Esna Park Drive, Unit 11-12 Markham, ON L3R 3B1 Phone: +1 905 907 0525 Email: info@avenview.com Sales: sales@avenview.com

Avenview USA

| | 00 Military Road Kenmore, NY | 4217 Phone: + | 716 218 4100 x223 Fax: + | 866 387 8764 Email: info@avenview.com

Avenview Europe Email: info@avenview.eu

Avenview Asia

Email: wenxi@avenview.com.hk Sales: sales@avenview.com.hk

Disclaimer

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.