

# *NEW PRODUCT GUIDE* 2019

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- 1. MAX-20      20x20 Media Axis Matrix Switcher
- 2. MAX-36      36x36 Media Axis Matrix Switcher
- 3. MAX-72      72x72 Media Axis Matrix Switcher
- 4. MAX-144     144x144 Media Axis Matrix Switcher
- 5. MAX-216     216x216 Media Axis Matrix Switcher



Features	Model Number   I/O Capacity
	MAX-20 20x20
Supports Ultra HD/4K 60Hz 4:4:4	•
Supports HDMI 2.0/HDCP2.2	•
Support High Dynamic Range (HDR)	Supports HDR10, Dolby Vision
Adaptive Ultra HD Distribution Platform with Bi-Directional Native-IP Conversion	•
iAxis™ Detachable Wireless Tablet for Control	Optional
Modular Design using Omni-Flex™ Technology	•
Hot-Swappable, Field Upgradeable MCU	•
Hot-Swappable, Field Upgradeable I/O Cards	•
Hot-Swappable, Field Upgradeable AirLift™ Cooling System Fan Blades	•
Hot-Swappable, Field Upgradeable Power Supplies	•
4K 60Hz 4:4:4 HDMI Input Cards with 5V Power	•
4K 60Hz 4:4:4 HDMI Output Cards with Motore™ 2.0 Scaling	•
4K 60Hz 4:4:4 HDBaseT Input/Output Cards with Precis Processing	•
HDBaseT/Twisted Pair Distance	330 ft
12G-SDI Input Cards	•
Fiber/HDMI to 12G-SDI Receiver with Motore™ 2.0 Scaling	•
Fiber Distance	Up to 6 mi / 9.7 km
4K 60Hz 4:4:4 Fiber I/O Cards with Adaptive Multimode/Singlemode Processing	•
4K 60Hz 4:4:4 IP Input/Output Cards with PureStream X Codec	•
4K 60Hz 4:4:4 HDBaseT/Fiber/IP Extender Options	•
Power Over Ethernet (POE)	•
Multiview and Videowall Processing	•
Audio Breakaway for Independent Audio Matrix Switching	•
Dolby Digital/DTS/PCM Pass-Through	•
Stereo Audio Insertion and Extraction	•
Bi-directional, RS-232 and LAN Control to Endpoints	•
Auto-EDID (EDID Library and Emulation)	•
SNMP Remote Monitoring	•
Input/Output System Diagnostics	•
Single System IP Address	•
Standard 19" Rack-Mountable	•
Field Updateable Firmware	•

Model Number   I/O Capacity			
MAX-36	MAX-72	MAX-144	MAX-216
36x36	72x72	144x144	216x216
•	•	•	•
•	•	•	•
Supports HDR10, Dolby Vision	Supports HDR10, Dolby Vision	Supports HDR10, Dolby Vision	Supports HDR10, Dolby Vision
•	•	•	•
Optional	Optional	Optional	Optional
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330 ft	330 ft	330 ft	330 ft
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Up to 6 mi / 9.7 km	Up to 6 mi / 9.7 km	Up to 6 mi / 9.7 km	Up to 6 mi / 9.7 km
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### HDMI



**MAX-HI**

4 HDMI Inputs with Audio Insert/Extract



**MAX-HO**

4 HDMI Outputs with Audio Insert/Extract

### HDBaseT



**MAX-CI**

4K/60 HDBaseT Inputs with Audio Insert/Extract



**MAX-CO**

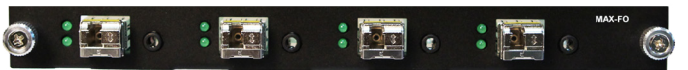
4K/60 HDBaseT Outputs with Audio Insert/Extract

### Fiber



**MAX-FI**

4K/60 1LC Fiber Optic Inputs with Audio Insert/Extract



**MAX-FO**

4K/60 1LC Fiber Optic Outputs with Audio Insert/Extract

### SDI



**MAX-SI-12G**

12G-SDI Inputs with Audio Insert/Extract

### MAX-CT101

4K/60 HDMI 2.0 over HDBaseT™ Extender - Transmitter

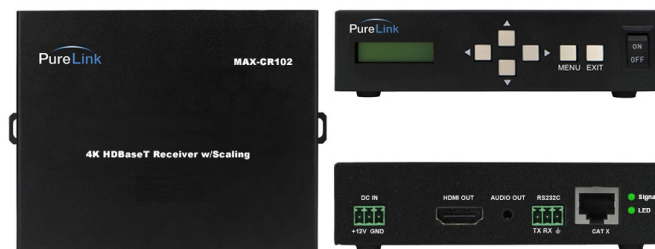


#### Technical Specifications:

<b>INPUT TYPE/S</b>	HDMI & analog stereo w/Deep Color, 3D, 4K	<b>AUDIO FORMATS</b>	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio®, LPCM up to 8 channels
<b>OUTPUT TYPE/S</b>	HDBaseT™ w/Deep Color, 3D, 4K	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2
<b>SUPPORTED RESOLUTIONS</b>	up to Ultra HD/4K (4096x2160 4:4:4 @ 50/60Hz)	<b>POWER CONSUMPTION</b>	DC +12V, 10 watts (max)
<b>MAX. DISTANCE</b>	330 ft (100m)	<b>WEIGHT</b>	1.5 Lbs (0.68 kg)

### MAX-CR102

4K/60 HDMI 2.0 over HDBaseT™ Extender - Receiver



#### Technical Specifications:

<b>INPUT TYPE/S</b>	HDBaseT™ w/Deep Color, 3D, 4K	<b>AUDIO FORMATS</b>	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio®, LPCM up to 8 channels
<b>OUTPUT TYPE/S</b>	HDMI & analog stereo w/Deep Color, 3D, 4K	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2
<b>SUPPORTED RESOLUTIONS</b>	up to Ultra HD/4K (4096x2160 4:4:4 @ 50/60Hz)	<b>POWER CONSUMPTION</b>	DC +12V, 10 watts (max)
<b>MAX. DISTANCE</b>	330 ft (100m)	<b>WEIGHT</b>	1.5 Lbs (0.68 kg)
<b>MEDIA PROCESSOR</b>	Motore™ 2.0		

### MAX-FT101

4K/60 HDMI 2.0 over Fiber Extender - Transmitter

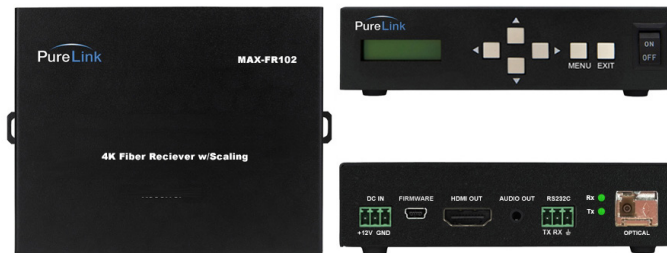


#### Technical Specifications:

<b>INPUT TYPE/S</b>	HDMI & analog stereo w/Deep Color, 3D, 4K	<b>AUDIO FORMATS</b>	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio®, LPCM up to 8 channels
<b>OUTPUT TYPE/S</b>	Fiber w/Deep Color, 3D, 4K	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2
<b>SUPPORTED RESOLUTIONS</b>	up to Ultra HD/4K (4096x2160 4:4:4 @ 50/60Hz)	<b>POWER CONSUMPTION</b>	DC +12V, 10 watts (max)
<b>MAX. DISTANCE</b>	Singlemode Fiber: up to 6miles (9.7 kilometers) Multimode Fiber: up to 1,650 ft (500m)	<b>WEIGHT</b>	1.5 Lbs (0.68 kg)

### MAX-FR102

4K/60 HDMI 2.0 over Fiber Extender - Receiver



#### Technical Specifications:

<b>INPUT TYPE/S</b>	Fiber w/Deep Color, 3D, 4K	<b>AUDIO FORMATS</b>	Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby® TrueHD, Dolby Atmos®, DTS®, DTS-ES, DTS 96/24, DTS-HD High Res, DTS-HD Master Audio®, LPCM up to 8 channels
<b>OUTPUT TYPE/S</b>	HDMI & analog stereo w/Deep Color, 3D, 4K	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2
<b>SUPPORTED RESOLUTIONS</b>	up to Ultra HD/4K (4096x2160 4:4:4 @ 50/60Hz)	<b>POWER CONSUMPTION</b>	DC +12V, 10 watts (max)
<b>MAX. DISTANCE</b>	Singlemode Fiber: up to 6miles (9.7 kilometers) Multimode Fiber: up to 1,650 ft (500m)	<b>WEIGHT</b>	1.5 Lbs (0.68 kg)
<b>MEDIA PROCESSOR</b>	Motore™ 2.0		



# VIP-200H II Tx/Rx HDMI & USB/KM over IP Distribution System

- Full HD/1080p@60Hz support
- HDCP 1.4 compliant
- Video wall processing (up to 8x8 configuration)
- Built-in scaler (Rx) - pass through or lock output resolutions
- RS-232 extension/streerable distribution
- USB 2.0 Keyboard/Mouse Extension
- Audio insertion and extraction
- Bi-directional RS-232 and IR control
- Loop-out on transmitter (encoder)
- Point to Point, Distribution, Switching, and Matrix systems
- Compatible with VPX IP Video Management Software



## Technical Specifications:

<b>AUDIO</b>	Up to 7.1LPCM 192Khz/ Dolby True HD/ DTS-HD Master Audio/ Dolby Atmos/ DTS:X	<b>SUPPORTED RESOLUTIONS</b>	Up to 1080p, 1920 x 1200 @60Hz
<b>INPUT TYPE/S</b>	Tx: (1) HDMI Type A; (1) 3.5mm Stereo Phone Jack (line-in); (1) USB 2.0 Type B Rx: (1) 3.5mm Mono Phone Jack (mic in); (1) Gigabit RJ45	<b>COMPLIANCE</b>	HDCP 1.4
<b>OUTPUT TYPE/S</b>	Tx: (1) HDMI Type A (loop output); (1) 3.5mm Stereo Phone Jack (line out); (1) Gigabit RJ45 Rx: (1) HDMI Type A; (1) 3.5mm Stereo Phone Jack (line out); (2) USB 2.0 Type A (left); (2) USB 1.1 Type A (right)	<b>RS-232</b>	Tx: (1) RS-232 DB9 Female Rx: (1) RS-232 DB9 Male
<b>DISTANCE</b>	Up to 492ft (150m)	<b>IR EXTENSION</b>	3.5mm Stereo Phone Jack 20-60Khz/ ±45°/ 5M
		<b>POWER CONSUMPTION</b>	1350mA (typical)
		<b>POWER SUPPLY</b>	DC 5V 2000mA
		<b>VPX SOFTWARE SUITE</b>	VPX IP Video Management Software; VPX WallMaster
		<b>DIMENSIONS</b>	5.51" x 4.92" x 1.18"
		<b>WEIGHT</b>	0.86 lbs (390g)
		<b>WARRANTY</b>	Limited warranty (3years)

# VIP-101H II Tx Wall Plate HDMI over IP Wall Plate Transmitter w/ PoE

- Full HD/1080p@60Hz
- HDCP 1.3 compliant
- Point to Point, Distribution, Switching, and Matrix Systems
- PoE (Power over Ethernet)
- Compatible with VIP-100 II System
- Available in black or white



## Technical Specifications:

<b>AUDIO</b>	HDMI w/embedded audio	<b>POWER SUPPLY</b>	(1) Phoenix 2-pin [5V DC, 600mA typical]
<b>CABLING</b>	CAT 5 UTP or better	<b>POE</b>	802.3af
<b>INPUT TYPE/S</b>	(1) HDMI v1.3 [19 pin Female]	<b>ENCLOSURE TYPE</b>	All metal, black or white powder coat finish
<b>OUTPUT TYPE/S</b>	(1) RJ-45 Female H.264 UDP Multicast [LAN]	<b>DIMENSIONS</b>	4.07" x 1.81" x 1.18" (103.5mm x 46mm x 30mm)
<b>DISTANCE</b>	120m (390ft)	<b>WEIGHT</b>	0.36 lbs (163g)
<b>SUPPORTED RESOLUTIONS</b>	Up to 1080p / 1920x1080	<b>WARRANTY</b>	Limited warranty (3years)
<b>COMPLIANCE</b>	HDCP 1.3		

# VIP-STREAM-100 HDMI Streaming Encoder

- Full HD/1080p@60Hz
- HDCP 1.3 compliant
- Industry standard H.264 codec
- Decode using H.264 compliant software such as VLC, Facebook, and Youtube
- Supports UDP, HTTP, RTSP, RTMP, ONVIF protocol
- Supports multiple simultaneous stream formats



## Technical Specifications:

INPUT TYPE/S	(1) HDMI Female	OPERATING TEMPERATURE	32°F ~ 131°F
OUTPUT TYPE/S	(1) CATx [H.264]	STORAGE TEMPERATURE	-4°F ~ 185°F
DISTANCE	330ft (100m)	RELATIVE HUMIDITY	95% NCH
SUPPORTED RESOLUTIONS	480i to 1080p@60Hz	DIMENSIONS	4.0" x 3.0" x 1.1"
COMPLIANCE	HDCP 1.3	WEIGHT	0.34 lbs
POWER SUPPLY	12V DC	WARRANTY	Limited Warranty (3years)

# VIP-CAM-100 3G-SDI IP Camera w/HDMI Output

- 2.14 Megapixel 1/2.8-inch Sensor
- H.264 and 3G-SDI outputs
- Advanced variable and smooth PTZ function for higher precision and reliability
- IP (H.265, H.264) and 3G/HD-SDI dual stream outputs
- IR remote control
- VISCA, PELCO, RS232, and HTTP control
- Table, ceiling, or wall mountable
- Easy configuration via OSD menu
- On-board SD card slot for local recording/storage
- Digital noise reduction



## Technical Specifications:

<b>IMAGE SENSOR</b>	1/2.8" Exmor CMOS, 2.14MP	<b>FIELD OF VIEW</b>	59.5° - 2.9°
<b>HD-SDI SIGNAL FORMATS</b>	1080p/60, 1080p/30, 1080i/60, 720p/30, 1080p/50, 1080p/25, 1080i/50, 720p/50, 720p/25	<b>MINIMUM ILLUMINATION</b>	0.5Lux (Color), 0.1Lux (B/W)
<b>FOCAL</b>	f = 4.7mm - 94.0mm	<b>SHUTTER SPEED</b>	1/1 - 1/10,000s
<b>IRIS</b>	F1.6 - F3.5	<b>AGC</b>	Auto/Manual
<b>OPTICAL ZOOM</b>	20X	<b>WHITE BALANCE</b>	Auto, Indoor, Outdoor, One push, Manual, Auto Track
<b>DIGITAL ZOOM</b>	12X	<b>AE CONTROL</b>	Auto, Manual, Shutter Priority, Iris Priority
<b>SHORTEST FOCUS DISTANCE</b>	10mm - 1000mm	<b>S/N RADIO</b>	≥50db

## Pan & Tilt:

<b>PAN RANGE</b>	-170° ~ +170°	<b>PRESET NUMBER</b>	256
<b>TILT RANGE</b>	-30° ~ +90°	<b>OSD</b>	Available
<b>PAN SPEED</b>	0.1° ~ 120°/s	<b>IMAGE FLIP</b>	Enabled
<b>TILT SPEED</b>	0.1° ~ 90°/s		

## Network:

<b>MAXIMUM IMAGE SIZE</b>	1920x1080@60fps	<b>PROTOCOL</b>	HTTP / RTP / TCP / UDP / RTSP / RTMP / ONV 1F
<b>VIDEO COMPRESSION</b>	H.265, H.264	<b>NETWORK SUPPORT</b>	Dual Stream; up to (10) simultaneous users
<b>AUDI COMPRESSION</b>	AAC		

## Interface:

<b>ETHERNET</b>	RJ45, 100M	<b>CONTROL INTERFACE</b>	RS-232, IR, RS-485
<b>VIDEO OUTPUT</b>	HD-SDI		

## General:

<b>CONTROL PROTOCOL</b>	VISCA and Daisy Chain Support, PELCO-P, PELCO-D	<b>OPERATING TEMPERATURE</b>	0°C - 40°C
<b>ADDRESS</b>	0 - 63	<b>STORAGE TEMPERATURE</b>	-20° - 60°C
<b>POWER SUPPLY</b>	DC 12V	<b>DIMENSIONS</b>	8.9" x 6.2" x 8.1"
<b>POWER CONSUMPTION</b>	<15W	<b>WEIGHT</b>	1.7 kg

# VIP-CAM-100-USB3

USB 3.0 Camera w/ DVI Output

- Up to 72.5° FOV (Field of View)
- USB 2.0 or USB 3.0 interface, raw data output
- Supports standard UVC protocol
- Up to 1080p60 HD video format
- Up to 12x optical zoom, 12x digital zoom
- IR remote controller included
- OSD (On Screen Display) menu; supports image flip
- DVI-D video interface (only for AMC-E200U3)
- Support standard VISCA & Pelco communication protocols
- RS-232 IN/IR & RS-232O UT/RS-485 control interface
- Supports daisy chain
- Special mechanical PTZ driving system ensures precise positioning



## Technical Specifications:

<b>IMAGE SENSOR</b>	1/2.8" CMOS, 2.14MP	<b>FOCUS</b>	Auto, Manual, PTZ Trigger AF, One push
<b>SUPPORTED RESOLUTIONS</b>	1920x1080p/60/50/30/25/20/15/10/5 1280x720p/60/50/30/25/20/15/10/5 1024x768p/60/50/30/25/20/15/10/5 800x600p/60/50/30/25/20/15/10/5 640x480p/60/50/30/25/20/15/10/5	<b>MIN. ILLUMINATION</b>	0.5Lux
<b>FOCAL</b>	9.9mm ~ 46.8mm	<b>SHUTTER SPEED</b>	1/1 - 1/10,000s
<b>IRIS</b>	F1.6 ~ F2.8	<b>GAIN</b>	Auto/Manual
<b>OPTICAL ZOOM</b>	12X	<b>WHITE BALANCE</b>	Auto, Indoor, Outdoor, One push, Manual, Auto Track, Sodium, Fluorescent
<b>DIGITAL ZOOM</b>	12X	<b>AE CONTROL</b>	Auto, Manual, Shutter Priority, Iris Priority, Intelligence
<b>FIELD OF VIEW</b>	72.5° ~ 6.3°	<b>BLC</b>	Yes
		<b>WDR</b>	Yes
		<b>NOISE REDUCTION</b>	2D/3D

## Pan & Tilt:

<b>PAN RANGE</b>	-170° ~ +170°	<b>PRESET NUMBER</b>	256
<b>TILT RANGE</b>	-30° ~ +90°	<b>OSD</b>	Yes
<b>PAN SPEED</b>	0.1° ~ 120°/s	<b>IMAGE FLIP</b>	Yes
<b>TILT SPEED</b>	0.1° ~ 80°/s		

## INTERFACE:

<b>VIDEO OUTPUT</b>	USB 3.0, DVI-D	<b>CONTROL INTERFACE</b>	USB 3.0, RS-232 IN/IR, RS-232 OUT/RS-485
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## General:

<b>CONTROL PROTOCOL</b>	VISCA and Daisy Chain Support, PELCO-P, PELCO-D	<b>DIMENSIONS</b>	9.57" x 5.71" x 6.42" in. (243 x 145 x 163 mm)
<b>ADDRESS</b>	0 - 63	<b>WEIGHT</b>	2.65 lbs (1.2 kg)
<b>POWER SUPPLY</b>	DC 12V		

# VIP-CAM-CTRL1

VISCA/PELCO Camera Controller for VIP-CAM Series

- 4D joystick for pan/tilt/zoom/focus control
- Compact, ergonomic design
- High brightness OLED display
- Auto backlight keys
- Shortcut keys customization
- Compatible with any PTZ cameras that use PELCO or VISCA control
- Up to 255 cameras using PELCO, 7 cameras using VISCA
- Support Pelco D/P, VISCA protocols
- Multi-level passwords
- 256 address



## Technical Specifications:

<b>COMM. INTERFACE</b>	RS-485, RS-232	<b>POWER SUPPLY</b>	DC12V
<b>PROTOCOL</b>	Pelco-D, Pelco-P, VISCA	<b>POWER CONSUMPTION</b>	<2W
<b>ADDRESS</b>	0-255 PELCO, 1-7 VISCA	<b>OPERATION TEMPERATURE</b>	0° ~ 40°C
<b>DISPLAY</b>	OLED	<b>STORAGE TEMPERATURE</b>	-20° ~ 50°C
<b>JOYSTICK</b>	4-axis	<b>HUMIDITY</b>	Up to 90% non-condensing
<b>BAUD RATE</b>	2400bps, 4800bps, 9600bps, 1920bps, 19200bps, 38400bps	<b>DIMENSIONS</b>	7.8" x 4.7" x 4.0" in.
		<b>WEIGHT</b>	1.1 lbs

# VIP-NET-M28A Modular L3 Managed Network Switch with AVB -1G/10G

- Custom configuration - houses any combination of (4) CAT/Fiber modules (up to 28 ports)
- Offers master clock synchronization between all connected AV devices
- AVB Technology delivers ultimate reliability and ultra-low latency
- Pre-configured for any closed AV over IP distribution system - no additional setup required
- TAA compliant



## Hardware:

<b>STANDARDS</b> IEEE 802.3 - 10Base-T IEEE 802.3u - 100Base-TX and 100Base-FX IEEE 802.3ab - 1000Base-T IEEE 802.z - 1000Base-X IEEE 802.3ae - 10Gigabit Ethernet IEEE 802.3x - Flow control IEEE 802.3ad - LACP (Link Aggregation Control Protocol) IEEE 802.1p - COS (Class of Service) IEEE 802.1Q - VLAN Tagging IEEE 802.1w - RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s - MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x - Authentication IEEE 802.1AB - LLDP (Link Layer Discovery Protocol)	<b>MAC ADDRESS</b> 32K <b>JUMBO FRAME</b> up to 10KB <b>PHYSICAL PORTS</b> -up to 3 slots for (8) 1G ports -1 slot for (4) 10G ports <b>ENCLOSURE</b> 19" rack-mountable <b>WEIGHT</b> 14.2 lbs. <b>DIMENSIONS</b> 17.3 in. (L) x 12.8 in. (W) x 1.7 in. (H) <b>WARRANTY</b> 3-Year Limited Warranty
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## Software:

### MANAGEMENT

- Hardware routing, RIP and static routing
- IEEE 1588v2 clock synchronization
- IEEE 802.1D Bridge, auto MAC address learning/aging and MAC address (static)
- Multiple Registration Protocol (MRP)
- MSTP (RSTP/STP compatible)
- Redundant Ring (O-Ring) with recovery time less than 30ms over 250 units
- TOS/Diffserv supported
- Quality of Service (802.1Q) with VLAN tagging
- IGMP v2/v3 Snooping
- IP-based bandwidth management
- DOS/DDOS auto prevention
- Port configuration, status, statistics, monitoring, security
- DHCP Server/Client
- DHCP Relay
- Modbus TCP
- SMTP Client
- SNTP Server

### SECURITY

- Device Binding security feature
- Enable/disable ports, MAC based port security
- Port based network access control (802.1x)
- MAC-based authentication
- MAC address limit
- VLAN (802.1Q) to segregate and secure network traffic
- Radius centralized password management
- SNMPv3 encrypted authentication and access security
- Https/SSH enhance network security
- Web and CLI authentication and authorization
- IP source guard

**NETWORK REDUNDANCY** MSTP (RSTP/STP compatible)

**RELAY** Relay output to carry capacity of 1A at 24VDC

**RS-232 SERIAL CONSOLE PORT** RS-232 in RJ-45 connector w/console cable - 115200bps, 8, N, 1

## Power:

**REDUNDANT POWER INPUT** Dual 24/48VDC (24~72VDC) power inputs at terminal block  
 Dual 100~240VAC/100~370VDC power inputs at terminal block

**POWER CONSUMPTION** 46 Watts (max)

**OVERLOAD CURRENT PROTECTION** Available

## VIP-NET-2404PP-1G Gigabit Network Switch w/PoE+

- 24 port 1000Base-T SFP, 4 Port 1000Base-X SFP
- (4) SFP+ Slots for 20G or 40G Interlink
- PoE+ (802.3 at) on all RJ45 ports
- PoE+ Port Configuration & Scheduling
- Bilt-in Device Management (DMS)



### Technical Specifications:

<b>FIXED PORT</b>	24 Port 1000Base-T SFP, 4 Port 1000Base-X SFP	<b>PACKET FORWARDING CAPACITY</b>	131 Mpps
<b>EXTENDED SLOT</b>	(4) SFP+ Slots for 20G or 40G Interlink	<b>OPERATING TEMPERATURE</b>	0° ~ 50°C
<b>POE FUNCTIONS</b>	IEEE802.3at (PoE+30W), IEEE802.3ad (PoE+15.4W)	<b>RELATIVE HUMIDITY</b>	5% ~ 95% non condensing
<b>POE POWER</b>	370W	<b>DIMENSIONS</b>	440 x 285 x 44.5 mm
<b>SWITCHING CAPACITY</b>	128 Gbps	<b>WEIGHT</b>	<4 kg
		<b>WRANTTY</b>	Limited warranaty (3years)

## VIP-NET-4804PP-1G Gigabit Network Switch w/PoE+

- 48 Port 1000Base-T SFP, 4 Port 1000Base-X SFP
- (4) SFP+ Slots for 20G or 40G Interlink
- PoE+ (802.3 at) on all RJ45 ports
- PoE+ Port Configuration & Scheduling
- Built-in Device Management (DMS)



### Technical Specifications:

<b>FIXED PORT</b>	48 Port 1000Base-T SFP, 4 Port 1000Base-X SFP	<b>PACKET FORWARDING CAPACITY</b>	131 Mpps
<b>EXTENDED SLOT</b>	(4) SFP+ Slots for 20G or 40G Interlink	<b>OPERATING TEMPERATURE</b>	0° ~ 50°C
<b>POE FUNCTIONS</b>	IEEE802.3at (PoE+30W), IEEE802.3ad (PoE+15.4W)	<b>RELATIVE HUMIDITY</b>	5% ~ 95% non condensing
<b>POE POWER</b>	740W	<b>DIMENSIONS</b>	440 x 285 x 44.5 mm
<b>SWITCHING CAPACITY</b>	176 Gbps	<b>WEIGHT</b>	5.6 kg
		<b>WRANTTY</b>	Limited warranaty (3years)

# MPX-50-U 4K Digital Signage Player

- 4K@60Hz 10-bit & 3D video output
- HDCP 2.2/1.4 compliant
- Audio L/R outputs
- Supports a wide range of media formats
- Customizable playback settings (Resume/Time/Auto-play/RTC/Repeat)
- Multi-language OSD menu



## Technical Specifications:

<b>PLATFORM</b>	Non-PC based, Quad-core Cortex-A7 Processor	<b>AUDIO</b>	MP3/WMA/FLAC/OGG/APE/AAC/AC3/QCP/DTS/DTS HD/True HD
<b>VIDEO OUTPUT</b>	HDMI 2.0 (up to 4K@60Hz 10-bit, 3D video)	<b>IMAGE</b>	JPEG/JPG/BMP/GIF/PNG/TIFF
<b>AUDIO OUTPUT</b>	RCA L/R jack with composite video	<b>SUBTITLES</b>	SUB, SMI, SSA, SRT, IDX+USB, PGS
<b>RAM</b>	8GB Nandflash	<b>OPERATING TEMPERATURE</b>	0°C~70°C Humidity: 10%~85%
<b>CARD READER</b>	SD/SDHC/MMC up to 64GB	<b>STORAGE TEMPERATURE</b>	-20°C~80°C Humidity: 5%~90%
<b>USB HOST</b>	USB/hard drive up to 2TB	<b>POWER INPUT</b>	DC 5V/2A
<b>PRODUCT DIMENSIONS</b>	8GB Nandflash	<b>POWER CONSUMPTION</b>	12W (max)
<b>VIDEO DECODING</b>	MOV/AVI/MP4/WMV/MKV/RM/RMVB/VOB/AVI/FLV/VC-1/RV10/DAT/MPG/MPEG		



## ECOH PRO Wireless Collaboration Hub

- Supports up to 8 users (4 users on screen simultaneously)
- Supports Windows, Mac, iOS, and Android devices
- Full HD (1080p) media streaming
- Supports integrated video conferencing with ZOOM
- Supports touch panel/mouse control
- Direct connect (separate from in-house network)
- Wi-Fi and Ethernet enabled
- Whiteboard (mark-up) support



### Technical Specifications:

<b>OC COMPATIBILITY</b>	Window 7/8/10, Mac, iOS, Android	<b>EXTENDED DESKTOP</b>	Available
<b>OUTPUT TYPE/S</b>	(1) HDMI, (1) VGA [3.5mm mini jack for audio out]	<b>CONNECTIONS</b>	(2) USB 2.0, (1) RJ-45 (network)
<b>SUPPORTED RESOLUTIONS</b>	720p, 1080p	<b>POWER CONSUMPTION</b>	10 Watts
<b>FRAME RATE</b>	Up to 30fps	<b>OPERATING TEMPERATURE</b>	32°~ 104°F (0°~40°C)
<b>VIDEO LATENCY</b>	100 ~ 200 ms	<b>RELATIVE HUMIDITY</b>	10%~90%
<b>MAX USERS ON SCREEN</b>	Up to (4) users	<b>RACK-MOUNTING OPTION</b>	Standard 19 inch rack-mountable design
<b>MAX NUMBER OF CONNECTIONS</b>	Up to (8) users/devices	<b>DIMENSIONS</b>	6.7" x 4.3" x 1.2" in.
		<b>WARRANTY</b>	Limited warranty (3years)

## ECOH PLUS Wireless Collaboration Hub

- Supports up to 8 total users (single user on screen)
- Full HD/1080p media streaming
- Supports transmission distances up to 20m. (line-of-sight)
- Plug and Play - switch between users with a simple button press
- Wirelessly extend any HDMI source (Blu-ray player, gaming console, streaming device, etc.)
- ECOH Plus Link Connector powered through HDMI port
- Kit includes base station and (1) Plus-Link connector



### Technical Specifications:

<b>OUTPUT TYPE/S</b>	(1) HDMI Type A [female]	<b>POWER CONSUMPTION</b>	5 Watts (max)
<b>SUPPORTED RESOLUTIONS</b>	1080p@50/60Hz, 720p@ 50/60Hz, 576p@50Hz, 480p@60Hz	<b>POWER SUPPLY</b>	DC 5V/2A
<b>MAX TRANSFER RATE</b>	4.95 Gbps	<b>OPERATING TEMPERATURE</b>	32° ~ 122°F (0° ~ 50°C)
<b>TRANSMISSION DISTANCE</b>	20 meters (line-of-sight)	<b>STORAGE TEMPERATURE</b>	14° ~ 158°F (-10° ~ 70°C)
<b>VIDEO LATENCY</b>	≤200 ms	<b>RELATIVE HUMIDITY</b>	0% ~ 90%
<b>MAX USERS ON SCREEN</b>	(1) user	<b>DIMENSIONS</b>	5.4" x 3.4" x 0.8" in.
<b>MAX NUMBER OF CONNECTIONS</b>	(8) users/devices	<b>WEIGHT</b>	0.3 lbs
<b>COMPLIANCE</b>	HDMI 1.3, HDCP 1.2	<b>WARRANTY</b>	Limited warranty (3years)

# HTX II-8800

8x8 4K HDMI to HDBaseT™ Matrix Switcher w/PoE

- HDMI 2.0b (18Gbps), HDCP 2.2, HDCP 1.4, and DVI compliant
- Supports resolutions up to 4K@60Hz (4:4:4) on all HDMI ports
- Supports automatic 4K@60Hz (4:4:4) to 4K@60Hz (4:2:0) conversion for all HDBaseT™ outputs
- Supports distance up to 330 ft. (100m) via CATx
- Supports pass-through audio up to 7.1 channels of High Definition audio (LPCM, Dolby TrueHD, and DTS-HD Master Audio)
- Built-in independent audio matrix with Volume, Mute, and Audio delay for lip-sync adjustment (LPCM only)
- HDR, ARC, CEC and smart EDID management supported
- 24V PoE on all HDBaseT™ ports
- Control via on-panel Button, IR, RS-232, LAN and Web GUI



## Technical Specifications:

<b>SUPPORTED RESOLUTION</b>	4K@50/60Hz (4:4:4), 4K@30Hz, 1080p@120Hz, and 1080 3D@60Hz	<b>OUTPUT TYPE/S</b>	(2) HDMI Type A [19-pin female] (9) IR Out [3.5mm Stereo Mini-jack] (8) L/R Audio Out [3.5mm Stereo Mini-Jack] (8) Coaxial Audio Out[RCA] (6) HDBaseT™ Out [RJ45]
<b>COLOR SPACE</b>	RGB, YCbCr 4:4:4, YCbCr 4:2:2	<b>DIMENSIONS (WxDxH)</b>	19" x 14.7" x 3.49"
<b>COLOR DEPTH</b>	8-bit, 10-bit, 12-bit	<b>WEIGHT</b>	14.77 lbs.
<b>HDMI AUDIO FORMATS (PASS-THROUGH)</b>	LPCM 2/5.1/7.1 CH, Dolby Digital, DTS 5.1, Dolby Digital+, Dolby TrueHD, DTS-HD Master Audio, Dolby Atmos, DTS:X	<b>POWER SUPPLY</b>	Input: AC100~240V 50/60Hz
<b>AUDIO FORMATS</b>	PCM 2.0, 32K/44.1K/48K/88.2K/96K/192K, 16/20/24bit	<b>MAX POWER</b>	85W
<b>AUDIO VOLUME</b>	-20dB~0dB	<b>OPERATING TEMPERATURE</b>	32°~104°F (0°C~40°C)
<b>L/R AUDIO FORMATS</b>	Analog Stereo 2CH	<b>STORAGE TEMPERATURE</b>	-4°F~140°F (-20°C~60°C)
<b>INFRARED</b>	20KHz~60KHz	<b>RELATIVE HUMIDITY</b>	20~90% RH (no condensation)
<b>INPUT TYPE/S</b>	(8) HDMI Type A [19-pin female] (10) IR In [3.5mm Stereo Mini-jack] (6) RS-232 [Phoenix jack] (1) Ethernet [RJ45] (1) RS-232 [DB9] (2) L/R Audio In [3.5mm Stereo Mini-jack] (2) Optical Audio In [S/PDIF] (2) Coaxial Audio In [RCA]		

# HWCE Tx/Rx

4K HDMI & USB 2.0 HDBaseT™ Wall Plate Extender

- Supports resolutions up to 4K@60Hz (4:2:0) / 4K@30Hz (4:4:4)
- Supports HDR (High Dynamic Range) content
- Supports HDCP 2.2, HDMI 1.4, USB 2.0
- Supports distance up to 130ft. (40m) at Ultra HD/4K and 230ft. (70m) at 1080p
- Independent analog audio signal transmission
- RS-232 & CEC pass-through
- Remote power from receiver to transmitter
- Standard US 1-Gang Decora Format (Tx)



## Technical Specifications:

<b>AUDIO</b>	Digital Audio: LPCM, Dolby Digital/Plus/Ex, Dolby True HD, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD Analog Audio: LPCM 2CH, LPCM 5.1, Dolby Digital 2/5.1CH, DTS 2/5.1CH	<b>SUPPORTED RESOLUTIONS</b>	4K@50/60Hz (4:2:0), 4K@30Hz (4:4:4), 1080p@120Hz, 1080p 3D@60Hz
<b>CONNECTOR TYPE/S (TX)</b>	Inputs: (1) HDMI Type A [19-pin female], (1) 3.5mm stereo audio, (1) USB Type B Outputs: (1) HDBaseT™ Out [RJ45]	<b>COLOR DEPTH</b>	8-bit, 10-bit, 12-bit
<b>CONNECTOR TYPE/S (RX)</b>	Inputs: (1) HDBaseT™ IN [RJ45] Outputs: (1) HDMI Type A, (1) 3.5mm stereo audio, (1) USB Type A, (1) Rs-232, (2) USB Type A	<b>COMPLIANCE</b>	HDMI 1.4, HDCP 2.2, USB 2.0
<b>DISTANCE</b>	Up to 130ft (40m) at Ultra HD/4K and 230ft (70m) at 1080p	<b>RS-232</b>	(1) RS-232 [3-pin phoenix]
<b>VIDEO BANDWIDTH</b>	10.2 Gbps	<b>POWER CONSUMPTION</b>	9 Watts
<b>COLOR SPACE</b>	RGB/YCbCr 4:4:4, YcbCr 4:2:2	<b>INPUT POWER</b>	AC100 - 240V 50/60Hz
		<b>POWER SUPPLY</b>	Tx: DC 24V/1A (US/EU standards, CE/FCC/UL certified) [2-pin phoenix] Rx: DC 24V/1A (US/EU standards, CE/FCC/UL certified)
		<b>DIMENSIONS (W x D x H)</b>	Tx: 4.07" x 1.81" x 1.18" (103.5mm x 46mm x 30mm) Rx: 5.51" x 2.95" x 0.91" (140mm x 75mm x 23mm)
		<b>WEIGHT</b>	Tx: 0.36 lbs (163g) RX: 0.44 lbs (200g)
		<b>WARRANTY</b>	Limited warranty (3years)

# HOF 2.0 Tx/Rx

## 4K HDMI Over 1LC Fiber Optic Extension System

- Supports resolutions up to 4K@60Hz (4:4:4)
- Support distances up to 3300ft. (1000m) over single-mode fiber
- Supports 18 Gbps, HDMI 2.0, HDCP 2.2
- Supports LPCM 7.1 audio, Dolby TrueHD, and DTS-HD Master Audio formats
- Bi-directional IR & RS-232 control
- Real-time Auto-EDID management
- Built-in repeater correct and enhances signal quality
- Inherently immune to electromagnetic interference (EMI)
- 1 LC SFP modules
- Locking power supplies



### Technical Specifications:

<b>AUDIO</b>	LPCM 2/5.1/7.1CH, Dolby Digital+, Dolby TrueHD, Dolby Digital, Dolby Atmos, DTS:X, DTS-HD Master Audio, DTS 5.1	<b>HDR SUPPORT</b>	HDR 10 (4K/60, 4:4:4), Dolby Vision (4K/30, 4:4:4)
<b>CONNECTOR TYPE/S (TX)</b>	Inputs: (1) HDMI Type A [19-pin female] Outputs: (1) Optical Fiber [LC Female]	<b>COLOR DEPTH COMPLIANCE</b>	8/10/12-bit
<b>CONNECTOR TYPE/S (RX)</b>	Inputs: (1) Optical Fiber [LC Female] Outputs: (1) HDMI Type A [19-pin female]	<b>RS-232</b>	HDMI 2.0, HDCP 2.2 (1) RS-232 [Phoenix connector]
<b>DISTANCE</b>	Up to 3300ft (1000m) over single-mode fiber, up to 1000ft (300m) over multi-mode fiber	<b>IR EXTENSION</b>	(1) IR input [3.5mm stereo mini-jack]; (1) IR output [3.5mm stereo mini-jack]
<b>SUPPORTED RESOLUTIONS</b>	Up to UHD/4K@50/60Hz (RGB 4:4:4, YCbCr 4:4:4, 4:2:2, 4:2:0)	<b>POWER CONSUMPTION</b>	3 Watts (max)
<b>VIDEO BANDWIDTH</b>	18 Gbps	<b>INPUT POWER</b>	AC100 - 240V 50/60Hz
		<b>POWER SUPPLY</b>	DC 24V/1A (US/EU standards, CE/FCC/UL certified)
		<b>OPERATING TEMPERATURE</b>	32°F ~ 117° F (0°C ~ 47° C)
		<b>STORAGE TEMPERATURE</b>	-4°F ~ 140° F (-20°C ~ 60°C)
		<b>RELATIVE HUMIDITY</b>	0~90% non-condensing
		<b>DIMENSIONS</b>	3.9" x 2.5" x 1.0" in.
		<b>WEIGHT</b>	0.5 lbs (0.26kg)
		<b>WARRANTY</b>	Limited warranty (3years)

# EZH2-DT

## Detachable HDMI 2.0 Over Fiber Cable

- Supports resolutions up to 4K/60 4:4:4
- Supports High Dynamic Range (HDR) content
- High quality, detachable Tx/Rx connectors
- Pre-terminated lengths up to 100 meters (328 ft.)
- Supports HDMI 2.0, HDCP 2.2/1.4, CEC
- 18 Gbps data rate (6 Gbps per channel)
- Pass-through EDID
- Plug-n-play (external power not required)



### Technical Specifications:

<b>AUDIO</b>	PCM 8-channel, Dolby Digital TrueHD, DTS-HD Master Audio	<b>VIDEO BANDWIDTH</b>	18 Gbps
<b>CONNECTOR TYPE/S (TX)</b>	(1) Male HDMI Connector (male DVI connector also available)	<b>HDR SUPPORT</b>	Yes
<b>CONNECTOR TYPE/S (RX)</b>	(1) Male HDMI Connector (male DVI connector also available)	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2/1.4, CEC Compliant
<b>SUPPORTED RESOLUTIONS</b>	4K@50/60Hz (4:4:4), 3D, 36-bit Deep Color	<b>POWER CONSUMPTION</b>	250mW (max)
		<b>OPERATING TEMPERATURE</b>	-4°F ~ 140°F (0°C ~ 50°C)
		<b>RELATIVE HUMIDITY</b>	5% ~ 85% RH
		<b>WARRANTY</b>	Limited warranty (3years)

# HEXA 2.0

## 4K HDMI Audio Extractor & Scaler

- Supports HDMI 2.0, HDCP 2.2, 4K@60Hz 4:4:4, 18 Gbps, 3D, HDR
- Extracts 4K HDMI audio and output to multi-channel digital or analog audio signal
- Route HDMI audio simultaneously via S/PDIF and 3.5mm stereo audio outputs
- Supports 1080p to 4K upscaling and 4K to 1080p downscaling
- Supports 4K60 4:4:4/4:2:2 (converts to 4K60 4:2:0)
- External digital audio input & output
- Built-in EDID management (2/5.1/7.1 patched EDID)
- Built-in 5-way joystick switch for full on-screen display (OSD) operation



### Technical Specifications:

<b>AUDIO</b>	Up to 7.1 LPCM 192KHz/ Dolby TrueHD/ DTS-HD MA	<b>VIDEO BANDWIDTH</b>	18 Gbps
<b>INPUT TYPE/S</b>	(1) HDMI Type A [female], (1) 3.5mm stereo jack [to DB-9 female for firmware updates]	<b>HDR SUPPORT</b>	Yes
<b>OUTPUT TYPE/S</b>	(2) HDMI Type A [female], (1) Optical digital audio, (1) 3.5mm stereo analog audio	<b>COMPLIANCE</b>	HDMI 2.0, HDCP 2.2
<b>SUPPORTED RESOLUTIONS</b>	Up to Ultra HD/4K (4096x2160 4:4:4 @60Hz), 3D, HDR	<b>POWER CONSUMPTION</b>	4 Watts
		<b>POWER SUPPLY</b>	Regulated DC 5V/1A
		<b>OPERATING TEMPERATURE</b>	14° ~ 113°F (-10° ~ 45°C)
		<b>STORAGE TEMPERATURE</b>	-22° ~ 158°F (-30° ~ 70°C)
		<b>RELATIVE HUMIDITY</b>	Up to 95% non-condensing
		<b>SHIPPING DIMENSIONS</b>	4.3" x 4.4" x 1.4" in.
		<b>SHIPPING WEIGHT</b>	0.6 lbs. (270 g)
		<b>WARRANTY</b>	Limited warranty (3years)

# HDG Pro

## 4K60 / HDCP 2.2 Signal Generator & Analyzer

- 4K@60Hz 4:4:4 8bit, 4K@60Hz 4:2:0 16 bit HDR pattern generator & signal analyzer
- Supports HDMI 2.0b, HDCP 2..2/1.4, 18 Gbps
- 4.3" Touchscreen panel
- Digital audio test function
- Supports HDMI loop through function
- HDCP test function to verify HDCP source and transmit
- Supports user-defined patterns (up to 2Gb)
- Rechargeable battery design
- Scrambling function or videos over 340M Hz
- Video pass-through mode (analyze the signal and monitor the video at the same time)
- Supports user control device through ethernet



### Technical Specifications:

<b>AUDIO</b>	PCM audio tone menu provided to test audio on display devices or A/V receivers. Set bits per sample, sample rate, level and audio channel	<b>VIDEO BANDWIDTH</b>	18 Gbps
<b>INPUT TYPE/S</b>	(1) HDMI Type A [female], (1) Ethernet [RJ45], (1) Firmware [USB Type A Female]	<b>HDR SUPPORT</b>	Yes
<b>OUTPUT TYPE/S</b>	(1) HDMI Type A [female], (1) Stereo Out [3.5mm mini-jack]	<b>COLOR SPACE</b>	DVI, RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
<b>SUPPORTED RESOLUTIONS</b>	Up to 4K @60Hz 4:4:4	<b>COLOR DEPTH</b>	8-bit, 10-bit 12-bit, 16-bit
		<b>COMPLIANCE</b>	HDMI 2.9b, HDCP 2.2, HDCP 1.4
		<b>POWER SUPPLY</b>	12V 5A
		<b>OPERATING TEMPERATURE</b>	86°F (30°C) or below
		<b>RELATIVE HUMIDITY</b>	60% or below RH (no condensation)
		<b>WARRANTY</b>	Limited warranty (3years)

## TCM-100 Table Mount Cable Management System

The TotalWire™ **TCM-100** is compact table mount enclosure with a manual tilt-up lid offering customizable connections for A/V and power. The **TCM-100** can house up to 12 AAP inserts including HDMI, VGA, Audio, USB, Network, and AC power.

- Accommodates AV cables and AC power outlets
- Modular design with tilting lid
- Convenient cable management for conference and board room tables
- Blank AAP and cable pass-through inserts also available
- Bezel dimensions: 10.5 x 5.1"
- Mounting hardware included



### A/V Inserts:

MODEL	DESCRIPTION	SIZE
TCM-100-HDMI	(1) HDMI	1U
TCM-100-VGA	(1) VGA	1U
TCM-100-VGA-A	(1) VGA, (1) 3.5mm audio	1U
TCM-100-USB	(1) USB	1U
TCM-100-NET	(2) Network/Cat6	2U

### Combination Ports:

MODEL	DESCRIPTION	SIZE
TCM-100-CM1UN	(1) Universal Outlet, (1) Network	3U
TCM-100-CM2UN	(1) Universal Outlet, (2) Network	4U

### AC Power

MODEL	DESCRIPTION	SIZE
TCM-100-AC1UN	(1) Universal Outlet	3U
TCM-100-AC1US	(1) US Outlet	3U
TCM-100-AC2US	(2) US Outlets	4U





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