



ALLEGATO II

Caratteristiche tecniche di equivalenza

Per ciascun prodotto richiesto sono elencate le caratteristiche tecniche che saranno confrontate fra il modello di riferimento ed eventuali prodotti alternativi proposti dalle aziende partecipanti, al fine di accertare l'equivalenza.

Le imprese partecipanti dovranno produrre nell'offerta tecnica idonea documentazione per consentire alla stazione appaltante di accertare l'equivalenza dei prodotti proposti rispetto a quelli definiti nel CSA.

Aula livello base

1) Tavolettina grafica 22" (tipo Wacom modello Cint 22)

- Display interattivo con penna
- Risoluzione (almeno Full HD 1.920 x 1.080)
- Spettro di colori (almeno 16,7 milioni)
- Presenza di supporto regolabile da inclinare o da piegare e riporre.
- Dimensioni display (orientativamente 650 x 400 x 55 mm)
- Dimensioni diagonale schermo (almeno 21.5 inch)
- Uso con mano destra o sinistra
- Compatibilità (almeno Windows e Mac)
- Peso
- Presenza di cavi inclusi
- Tipologia di connessione display e periferiche
- Tecnologia display (tecnologia di riferimento: H-IPS LCD)
- Angolo di visualizzazione
- Rapporto di contrasto
- Luminosità
- Velocità di risposta del monitor
- Area attiva (orientativamente 479 x 271 mm)
- Multi-touch
- Tecnologia dei sensori per la rilevazione della scrittura con penna (tecnologia di riferimento: Electromagnetic Resonance Method)
- Tecnologia della penna (riferimento: pressure-sensitive, cordless, battery-free)
- Caratteristiche della penna (tip switch, side switch, eraser, impugnatura, presenza supporto, materiali, punte ecc.)
- Risoluzione della penna (almeno 5080 lpi)
- Livelli di pressione della penna
- Presenza di tasti per funzioni rapide (riferimento: ExpressKey)
- Presenza di zone touch personalizzabili (riferimento: Touch Strip)
- Presenza di menu personalizzabili di scelta rapida (riferimento: menu radiale)



2) MiniPC (tipo DELL Optiplex 3070 Mini PC)

- Fattore di forma (riferimento: Micro Form Factory)
- Sistema operativo: Windows 10
- Processore
- Hard Disk
- RAM
- Presenza e tipologia mouse e tastiera
- Presenza e tipologia scheda LAN
- Presenza e tipologia scheda wireless
- Presenza e tipologia Bluetooth
- Numero e caratteristiche porte USB
- Numero e caratteristiche porte per display
- Presenza e tipologia porte audio

3) Videocamera brandeggiabile Full HD Camera, 1920x1080p 60 fps, 20x optical zoom (tipo Lumens VC-A50P)

- Sensor: 1/2.8" 2MP CMOS
- Video Output:
 - 1080p 60 / 59.94 / 50 / 30 / 29.97 / 25 fps,
 - 1080i 60 / 59.94 / 50 fps,
 - 720p 60 / 59.94 / 50 fps
- Optical Zoom: 20x
- Panning Angle: -170° ~ +170°
- Tilting Angle: -30° ~ +90°
- Preset Positions: 128
- Video Output (HD) Interface: 3G-SDI, HDMI, Ethernet
- Video Stream: RTSP / RTMP
- PoE: PoE+ (IEEE802.3at)
- Camera Control Interface: RS-232 / RS-422 / Ethernet
- Camera Control Protocol: VISCA / PELCO D / ONVIF
- Video S/N Ratio: > 50dB
- Shutter Speed: 1/1 ~ 1/10,000 sec
- Focal Length: f = 4.7 ~ 94 mm
- Video Compression: MJPEG, H.264 / SVC
- 3D NR: Yes
- Horizontal Viewing Angle: 63°
- Aperture: F1.6 ~ F3.5
- Minimum Illumination: 1.0 lux (F1.6, 50IRE, 30fps)
- Minimum Object Distance: 1.2m
- Gain Control: Auto, manual
- White Balance: Auto, indoor, outdoor, one-push, manual
- Exposure Control: Auto, manual
- Focus System: Auto, manual





- Image Flip: Yes
- Audio Input: Line In / MIC In
- Audio Output: Ethernet, SDI and HDMI
- Power consumption: Power On : 16W, Standby : 12W

4) **Acquisizione USB Capture HDMI Gen 2 - HDMI + Embedded Audio (Tipo Magewell 32060)**

- Supported OS: Windows, Linux (support x86, x64 & ARM architecture), Mac, Chrome OS
- Supported APIs:
 - Windows: DirectShow, Wave API/DirectSound/WASAPI
 - Linux: V4L2, ALSA
 - macOS: AVCaptureSession, AudioUnit
- Supported Software: VLC, VirtualDub, OBS, XSplit, vMix, VidBlaster, Wirecast, Microsoft Media Encoder, Adobe Flash Media Encoder, Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software
- Input Interfaces HDMI: DVI-D 1.0, HDMI 1.4a
- Host Interface USB 3.0: compatible with USB 2.0, compatible with USB 3.1 Gen 1
- Input features: Support for input video resolutions up to 2048x2160
- HDMI Specific Features:
 - i. 165MHz HDMI receiver
 - ii. Adaptive HDMI equalizer support for cables lengths up to 30M
 - iii. Support for customized EDID
 - iv. Support for extraction of AVI/Audio/SPD/MS/VIS/ACP/ISRC1/ISRC2/Gamut InfoFrames
 - v. Full colorimetry support
 - vi. Support for 8/10/12-bit color depth
 - vii. Support for RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
 - viii. Support for 2 channel IEC60958 audio streams
 - ix. Support for extraction of audio formation information & channel status data
 - x. Support for extraction of video timing information
 - xi. Support for extraction of 3D format information
 - xii. Support for Side-by-Side Half, Top-and-Bottom, Frame Packing 3D mode.
- Video Capture format:
 - i. Support for capture resolutions up to 2048x2160
 - ii. Support for capture frame rates up to 120fps (Actual capture frame rate can be limited by the USB bandwidth and internal working frequency. Typical capture frame rates on the Intel USB3.0 controller are as follows.)
 1. 1920x1080 YUY2 (up to 75fps)
 2. 1920x1080 RGB24 (up to 60fps)
 - iii. Support for YUY2 & UYVY 4:2:2 8-bit
 - iv. Support for RGB24 & RGB32 4:4:4 8-bit
 - v. The default capture format is YUY2. More capture formats can be set using USB Capture Utility.
- Video Processing Features:



- i. Video processing pipelines with 160 Mpixels/s processing bandwidth
 - ii. Video cropping
 - iii. Video scaling
 - iv. Video de-interlacing
 1. Weave
 2. Blend top & bottom field
 3. Top field only
 4. Bottom field only
 - v. Video aspect ratio conversion
 1. Auto or manual selection of input aspect ratio
 2. Auto or manual selection of capture aspect ratio
 3. Three aspect ratio conversion modes: Ignore (Anamorphic), Cropping or Padding (Letterbox or Pillarbox)
 - vi. Video color format conversion
 1. Auto or manual selection of input color format & quantization range
 2. Auto or manual selection of capture color format, quantization range & saturation range
 3. Support for RGB, YCbCr 601, YCbCr 709 color formats
 4. Support for Limited or Full quantization range
 5. Support for Limited, Full & 'Extended gamut' saturation range
 - vii. Video frame rate conversion
 - viii. Vertical flip and mirror
- Multiple devices on one computer: Support for connecting multiple USB devices to one system, Support for setting the device serial number as the device name shown in the system using USB Capture Utility
 - SDK: The USB Capture SDK provide functions including signal status extraction, capture configuration and real-time audio & video capture, etc.
 - Firmware Upgrade: Multiple devices in one system can be upgraded simultaneously
 - LED Indicator: Status LEDs indicate the working state of each channel:
 1. Pulsing slowly: idle
 2. On: input signal locked
 3. Off: input signal unlocked
 4. Double blinks: memory failed or FPGA configuration failed
 - Accessories: USB 3.0 cable
 - Power Consumption: 5V max current: ~0.5 A, max power consumption: ~2.5 W
 - Working Environment:
 - i. Operating temperature: 0 to 50 deg C
 - ii. Storage temperature: -20 to 70 deg C
 - iii. Relative Humidity: 5% to 90% non-condensing

5) Scaler HDMI-HDMI (tipo Kramer VP 424)

- INPUT: 1 HDMI connector
- OUTPUT: 1 HDMI connector



- OUTPUT RESOLUTIONS: Native, 480p, 576p, 720P, 1080i, 1080p, 640x480, 800x600, 1024x768, 1280x800, 1280x1024, 1360x768, 1400x1050, 1440x900, 1600x900, 1600x1200, 1680x1050, and 1920x1200(RB)
- OUTPUT REFRESH RATE: 60Hz for computer graphics resolutions, 50/60Hz for HDTV resolutions, follow input
- PROCESSING DELAY: 20ms
- CONTROLS: Front panel buttons, ON and input LEDs
- POWER CONSUMPTION: 5.2V DC, 630mA
- OPERATING TEMPERATURE: 0° to +40°C (32° to 104°F)
- STORAGE TEMPERATURE: -40° to +70°C (-40° to 158°F)
- HUMIDITY: 10% to 90%, RHL non-condensing
- INCLUDED ACCESSORIES: Power supply

6) Matrice 4x4 HDMI 4K, HDR (tipo TVONE MX-6544)

- Caratteristiche
 - i. HDMI 2.0a compliant
 - ii. 4K2K@60 4:4:4 processing with 8bit and 10bit color depth
 - iii. HDR for deep color resolution
 - iv. HDCP 2.2 compliant
 - v. Save up to 16 presets
 - vi. Control via Front panel buttons, RS-232, TCP/IP, InfraRed and MX-tools
 - vii. Supports 7.1 channel digital audio, DTS, Master and Dolby TrueHD
 - viii. Auto-detect EDID learning and management
 - ix. Robust 1RU rack-mountable metal case
- Connessioni
 - i. Input
 1. 8 x HDMI (MX-6588/6584)
 2. 4 x HDMI (MX-6544)
 3. 1 x 9-pin D-sub Female (RS-232)
 4. 1 x Ethernet
 5. 1 x 3.5mm IR receiver
 6. 1 x USB Type A (Firmware only)
 - ii. Output
 1. 8 x HDMI (MX-6588)
 2. 4 x HDMI (MX-6584/6544)
 - iii. Control Via Front panel button, IR remote control, RS-232 control, TCP/IP and MX-tools

7) Cavo di prolunga in fibra HDMI 4K - 60m (tipo Purelink FX-I350-060)

- Caratteristiche e prestazioni
 - i. Active optical fiber transmission at full 18 Gbps bandwidth
 - ii. Resolutions up to 4K@60Hz 4:4:4 incl. HDR 10, HDR 12 and Dolby Vision
 - iii. HDMI 2.0, HDMI 1.x and DVI 1.0 compliant
 - iv. HDCP 2.2, HDCP 1.4 compliant
 - v. Supports CEC and transparent EDID
 - vi. Zero frame delay, no latency, no compression
 - vii. Hybrid Construction, super lightweight, small bend radius, compact design
 - viii. Supports all HDMI audio formats incl. Dolby TrueHD and DTS-HD Master Audio
 - ix. Kevlar reinforced sheath
 - x. Easy Plug & Play installation



xi. Metal housing for optimized EMI protection

8) MIXER COMPATTO 6 CANALI CON MULTIEFFETTO (+1 AUDIO USB dal Podio) (tipo Monacor ZZMXBTE6)

- 4 ingressi mic + 1 stereo Line
- Interfaccia USB audio integrata
- (Permette la connessione a PC/Mac in registrazione e in riproduzione)
- Connettività Bluetooth
- Alimentazione phantom +48V
- Equalizzatore british a 3 bande su ogni canale
- Unità multieffetto DSP integrata con 16 effetti
- Indicatore di livello master a 5 LED
- Uscita cuffie
- Uscita control
- Send/Return
- Ingresso MIC XLR
- Risposta in frequenza 20-20'000Hz
- Gain Range più10/più60 dB
- Livello MAX di ingresso 12dBu @10dB Gain
- Impedenza 26KO
- Ingresso LINE Jack Bil/sbil 6.3mm TRS
- Impedenza 20KO bilanciato
- Gain Range meno10/più40dB
- Livello MAX di ingresso 30 dBu
- EQ canale Alti 12KHz/15Db; Medi 2.5KHz/15dB; Bassi 80Hz/15dB
- Uscita MAIN Jack 6.3mm 2400
- Uscita CUFFIA Jack stereo
- Freq. di campionamento 40KHz
- Alimentazione 230V 50/60Hz

9) MIXER AMPLIFICATORE 240W (tipo Monacor PA-924)

Mono PA mixing amplifier

- 1 x 240 W
- 4 balanced microphone inputs and line inputs with selectable priority
- 4 stereo line inputs
- Speaker outputs via screw terminals
- Balanced line output
- Record output
- Insert facility, e.g. for effect units, equalizers, feedback controllers
- 2-tone or 4-tone chime, can be activated externally
- Input level control and output level control
- 2-way tone control for the output
- Switchable 48 V phantom power for microphone inputs
- Temperature-controlled fan
- Mains operation or 24 V emergency power operation
- Removable mounting brackets

Technical specifications

- Peak output power 340 W



- Power rating 240 W
- Channels 5
- Inputs 2.5-100 mV (mic), 350 mV (line)
- Frequency range 50-16,000 Hz
- Equalizer bass ± 10 dB/100 Hz
- Equalizer treble ± 10 dB/10 kHz
- S/N ratio > 75 dB
- THD $< 0.1\%$
- Mains voltage ~ 230 V
- Mains frequency 50 Hz
- Power consumption, operation 640 VA
- Operating voltage (possible alternative) DC 24 V
- Power supply (possible alternative) DC 18 A
- Admiss. ambient temp. 0-40 °C
- Rack spaces, RS 2
- Connections
 - i. 4 x XLR (mic),
 - ii. 4 x RCA L/R (line),
 - iii. 1 x XLR (line out),
 - iv. 1 x RCA L/R (line out),
 - v. screw terminals (speakers)

10) COLONNA SONORA IN LEGNO 100V - 60W (tipo Monacor ETS-360TW/WS)

- Active/passive passive
- Transmission method 100 V
- Power rating (RMS) 60/30/15 W
- Frequency range 90-19,000 Hz
- Bass speaker 2
- Midrange speaker 4
- Tweeter 1
- Number of speakers 6+1
- Sensitivity 94 dB/W/m
- Housing material wood
- Mounting device mounting brackets
- Admiss. ambient temp. 0-40 °C



Aula livello medio

1) Schermo 75" multitouch - staffa a parete inclusa (tipo Promethean Monitor Touch A75-EU-1 Cobalt)

- Display
 - i. Diagonal Size 75" 4K
 - ii. Screen Type TFT LCD (Direct LED Backlight)
 - iii. Aspect Ratio 16:9
 - iv. Display Area 1652 x 930 mm (65 x 36.6 in)
 - v. Bezel Depth (Glass to bezel edge) 5.3 mm;
 - vi. Resolution 3840 x 2160 px @ 60 Hz
 - vii. Display Colors 1.07 Billion (10 bits)
 - viii. Response Time 8 ms
 - ix. Refresh Rate 60 Hz
 - x. Contrast Ratio 4000:1
 - xi. Brightness (350 cd/m2) typical
 - xii. Glass Hardness 7 Mohs, 9H pencil
 - xiii. Glass Type Heat-tempered, Anti-Glare
 - xiv. Ambient Light Sensor Yes
 - xv. Freeze Screen Yes
 - xvi. Blank Screen Yes
- Interactivity
 - i. Continuous Touch Points Up to 10;
 - ii. Gestures and Edge Swipes Windows® Supported
 - iii. Touch Technology InGlass Technology
 - iv. Touch Resolution 0.4 mm (minimum)
 - v. Contact Detection Height =<0.95 mm @ 2 mm object size
 - vi. Max Touch Response Time 18 ms (first touch), 13 ms (continuous)
 - vii. Touch Accuracy 1 mm
 - viii. Tracking Rate 4 m/s
 - ix. Scan Rate =<6.7 ms
 - x. Whiteboard Gesture controls, palm and block erase, protractor, ruler, and more
 - xi. Compatibility Windows® 7 to 10
OS X® 10.8 to 10.11
macOS® Sierra 10.12.1 or later
Linux® Ubuntu 16.04 LTS
Chrome OS
- Connectivity
 - i. HDMI In x4 (2.0)
 - ii. HDMI Out x1
 - iii. USB Touch x4
 - iv. VGA In x1
 - v. VGA Audio In x1
 - vi. Audio Out (3.5 mm) N/A
 - vii. SPDIF Out x1
 - viii. YPbPr N/A
 - ix. CVBS N/A
 - x. Mic In (3.5 mm) x1
 - xi. Headphone x1
 - xii. USB 2.0 x2



xiii.	USB 3.0	x1
xiv.	RS232 Serial	x1
xv.	OPS Slot	x1
xvi.	RJ45 In	x1
xvii.	RJ45 Out	x1
xviii.	SD Card	x1 Micro
•	Audio	
i.	Speakers	Front-facing stereo speakers
ii.	Power	2 x 15 W
•	Pen	
i.	Pens Included	x2
ii.	Pen Type	Touch differentiated battery-less pen
iii.	Pen Holder	Integrated full-length pen tray and accessory holder
iv.	Pen Tip Diameter	2x 4 mm;
•	Android Module	
i.	Product Name	ActivConnect OPS-G
ii.	Operating System	Android 6.0 Marshmallow
iii.	CPU	Realtek RTD1295 Quad Core, Up to 1.4 GHz
iv.	GPU	ARM T820; Up to 4K @ 60Hz
v.	RAM	2 GB DDR4
vi.	Internal Storage	16 GB
vii.	Ethernet Connectivity	x1 RJ-45 (10/100/1000Mbps)
viii.	Wi-Fi & Bluetooth	IEEE® 802.11a/b/g/n Wireless 802.11AC 2x2, Bluetooth 4.1
ix.	Connectivity Ports	x1 Micro SD card reader and supports memory size up to 32GB; x2 USB-A 2.0; x1 HDMI In; x1 USB-B Touch
x.	Hotspot Access Point	Yes
•	Power	
i.	Power Requirements	100V - 240V AC
ii.	Power Consumption (Normal)	<=300 W
iii.	Power Consumption (Standby)	<=0.5 W
iv.	Ultra-Quiet Fanless Design	Yes
•	Environmental	
i.	Operating Temperature	0°C to 40°C (32°F to 104°F)
ii.	Storage Temperature	-15°C to 55°C (-5°F to 131°F)
iii.	Operating Humidity	20% to 80% non-condensing humidity
iv.	Storage Humidity	20% to 90% non-condensing humidity

2) Carrello mobile da pavimento con ruote (tipo carrello originale per modello Promethean)

- Supporto mobile non regolabile in altezza per formati da 75"
- Specifiche Fisiche
 - i. Dimensioni prodotto 1300 x 1805 x 950 mm (51 x 71 x 37")

3) MiniPC (tipo DELL Optiplex 3070 Mini PC)

- Fattore di forma (riferimento: Micro Form Factory)
- Sistema operativo: Windows 10
- Processore



- Hard Disk
- RAM
- Presenza e tipologia mouse e tastiera
- Presenza e tipologia scheda LAN
- Presenza e tipologia scheda wireless
- Presenza e tipologia Bluetooth
- Numero e caratteristiche porte USB
- Numero e caratteristiche porte per display
- Presenza e tipologia porte audio

4) **Sistema Multiview 4ch HDMI Ris . Input 1920x1080 @60p**

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5) **MICROFONO DA TAVOLO WIRELESS CON TRASMETTITORE MULTIFREQUENZA (tipo Monacor TXS-606DT)**

- Description desktop microphone transmitter
- Transmission method wireless
- Polar pattern cardioid
- System electret
- Carrier frequency range 672.000-696.975 MHz
- Transmitting power 25 mW/2.5 mW
- Power supply 2 x 1.5 V batt. AA size
- Operating time > 8 h
- Audio frequency range 30-18,000 Hz
- Admiss. ambient temp. 0-40 °C

6) **TRASMETTITORE MICROFONO A CLIP MULTIFREQUENZA, 667.000-691.750 (tipo Monacor TXS-606LT)**

- General information
 - i. Description pocket transmitter
 - ii. Carrier frequency range 672.000-696.975 MHz
 - iii. Audio frequency range 30-18,000 Hz
 - iv. Channels 1
 - v. Operating time > 8 h
 - vi. Admiss. ambient temp. 0-40 °C
- Specifications transmitter
 - i. Transmitting power 10 mW
 - ii. Power supply transmitter 2 x 1.5 batt. AA size
 - iii. Connections transmitter 1 x 3.5 mm jack

7) **RICEVITORE MULTIFREQUENZA A 4 CANALI, 67 2.000-696.975 MHZ (tipo Monacor TXS-646)**

- 1000 canali UHF regolabili (672,000-696,975MHz) in 10 gruppi da 100 canali cad.
- funzione ACT per trasmettere la frequenza scelta dal trasmettitore tascabile TXS-606LT o dal microfono a mano TXS-606HT tramite segnali a infrarossi
- ricerca canali automatica
- sistema True-Diversity con antenne staccabili (connettori BNC)
- volume e squelch regolabili



- spie a LCD per gruppo/canale, antenna A/B, livello trasmissione HF e livello NF audio e spia a LED supplementare del livello audio
 - uscita XLR per canale, bil.
 - uscita jack 6,3mm per il segnale miscelato
 - contenitore robusto di metallo
 - alimentatore in dotazione
 - montaggio in rack 482 mm (19"), 1 U
 - Frequenza portante: 672,000-696,975MHz
 - RF Rapporto S/R: 105dB
 - Campo di frequenze audio: 30-18000Hz
 - Fattore di distorsione: < 0,5%
 - Campo dinamico: 120dB
 - Uscita audio: 350mV/6000 (jack) 25mV/6000 (XLR, bil.)
 - Temp. di esercizio ammessa: 0-40 °C
 - Alimentazione: tramite alimentatore in dotazione
- 8) Videocamera brandeggiabile Full HD Camera, 1920x1080p 60 fps, 20x optical zoom (tipo Lumens VC-A50P)**
- Sensor: 1/2.8" 2MP CMOS
 - Video Output:
 - i. 1080p 60 / 59.94 / 50 / 30 / 29.97 / 25 fps,
 - ii. 1080i 60 / 59.94 / 50 fps,
 - iii. 720p 60 / 59.94 / 50 fps
 - Optical Zoom: 20x
 - Panning Angle: -170° ~ +170°
 - Tilting Angle: -30° ~ +90°
 - Preset Positions: 128
 - Video Output (HD) Interface: 3G-SDI, HDMI, Ethernet
 - Video Stream: RTSP / RTMP
 - PoE: PoE+ (IEEE802.3at)
 - Camera Control Interface: RS-232 / RS-422 / Ethernet
 - Camera Control Protocol: VISCA / PELCO D / ONVIF
 - Video S/N Ratio: > 50dB
 - Shutter Speed: 1/1 ~ 1/10,000 sec
 - Focal Length: f = 4.7 ~ 94 mm
 - Video Compression: MJPEG, H.264 / SVC
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 - Minimum Object Distance: 1.2m
 - Gain Control: Auto, manual
 - White Balance: Auto, indoor, outdoor, one-push, manual
 - Exposure Control: Auto, manual
 - Focus System: Auto, manual



- Image Flip: Yes
- Audio Input: Line In / MIC In
- Audio Output: Ethernet, SDI and HDMI
- Power consumption: Power On : 16W, Standby : 12W
- Package Contents
- Instruction for installation:
 - i. Remote Control
 - ii. Power Cord
 - iii. Power Adapter
 - iv. RS-422 Connector
 - v. Metal Plate A / B
 - vi. M3 Screws

9) Acquisizione USB Capture HDMI Gen 2 - HDMI + Embedded Audio (Tipo Magewell 32060)

- Supported OS: Windows, Linux (support x86, x64 & ARM architecture), Mac, Chrome OS
- Supported APIs:
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 - Linux: V4L2, ALSA
 - macOS: AVCaptureSession, AudioUnit
- Supported Software: VLC, VirtualDub, OBS, XSplit, vMix, VidBlaster, Wirecast, Microsoft Media Encoder, Adobe Flash Media Encoder, Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software
- Input Interfaces HDMI: DVI-D 1.0, HDMI 1.4a
- Host Interface USB 3.0: compatible with USB 2.0, compatible with USB 3.1 Gen 1
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 - v. Full colorimetry support
 - vi. Support for 8/10/12-bit color depth
 - vii. Support for RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
 - viii. Support for 2 channel IEC60958 audio streams
 - ix. Support for extraction of audio formation information & channel status data
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 - xi. Support for extraction of 3D format information
 - xii. Support for Side-by-Side Half, Top-and-Bottom, Frame Packing 3D mode.
- Video Capture format:
 - i. Support for capture resolutions up to 2048x2160
 - ii. Support for capture frame rates up to 120fps (Actual capture frame rate can be limited by the USB bandwidth and internal working frequency. Typical capture frame rates on the Intel USB3.0 controller are as follows.)



1. 1920x1080 YUY2 (up to 75fps)
 2. 1920x1080 RGB24 (up to 60fps)
 - iii. Support for YUY2 & UYVY 4:2:2 8-bit
 - iv. Support for RGB24 & RGB32 4:4:4 8-bit
 - v. The default capture format is YUY2. More capture formats can be set using USB Capture Utility.
- Video Processing Features:
 - i. Video processing pipelines with 160 Mpixels/s processing bandwidth
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 1. Weave
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 1. Auto or manual selection of input color format & quantization range
 2. Auto or manual selection of capture color format, quantization range & saturation range
 3. Support for RGB, YCbCr 601, YCbCr 709 color formats
 4. Support for Limited or Full quantization range
 5. Support for Limited, Full & 'Extended gamut' saturation range
 - vii. Video frame rate conversion
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 - Multiple devices on one computer: Support for connecting multiple USB devices to one system, Support for setting the device serial number as the device name shown in the system using USB Capture Utility
 - SDK: The USB Capture SDK provide functions including signal status extraction, capture configuration and real-time audio & video capture, etc.
 - Firmware Upgrade: Multiple devices in one system can be upgraded simultaneously
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 1. Pulsing slowly: idle
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 3. Off: input signal unlocked
 4. Double blinks: memory failed or FPGA configuration failed
 - Accessories: USB 3.0 cable
 - Power Consumption: 5V max current: ~0.5 A, max power consumption: ~2.5 W
 - Working Environment:
 - i. Operating temperature: 0 to 50 deg C



- ii. Storage temperature: -20 to 70 deg C
- iii. Relative Humidity: 5% to 90% non-condensing

10) Sistema di presentazione e collaborazione wireless (tipo Barco WePresent WiCS-2100)

- Sistema operativo
 - i. Windows 7, 8, 8.1, 10 e versioni successive
 - ii. Mac OS X, 10.9 e versioni successive
 - iii. Android 4.0 e versioni successive
 - iv. iOS 9 e versioni successive
- Supporto standard di settore nativo
 - i. Apple AirPlay
 - ii. Google Chromecast
- Uscita video 1 x HDMI
- Velocità fotogrammi fino a 30 fps
- Risoluzione uscita fino a 1080p
- Utenti collegati fino a 32 tramite Wi-Fi o 64 tramite LAN
- Sorgenti fino a 4 connessioni simultanee con layout schermo dinamico
- Uscite audio
 - i. HDMI
 - ii. analogico tramite jack audio 3,5 mm
- Protocollo di autenticazione
 - i. WPA
 - ii. WPA 2 PSK
 - iii. WPA enterprise
- Protocollo di trasmissione wireless 2,4G(b/g/n)/5G(a/n/ac) commutabile
- Interfacce
 - i. 1 x Ethernet LAN
 - ii. 1 x (posteriore) + 1 x (anteriore) USB
- Consumo energetico
 - i. Adattatore per alimentatore (DC 12V/2A)
 - ii. Alimentazione via Ethernet
- Dissipazione calore 19 BTU/h
- Peso
 - i. 1000±5% g (con confezione)
 - ii. 344±5% g (senza confezione)
- Temperatura ambiente
 - i. Temperatura operativa: 0 °C -+40 °C
 - ii. Stoccaggio: -20 °C -+70 °C
- Umidità ambientale
 - i. Operativa: 85%
 - ii. Stoccaggio: 90% di umidità relativi

11) Scaler HDMI-HDMI (tipo Kramer VP 424)

- INPUT: 1 HDMI connector
- OUTPUT: 1 HDMI connector
- OUTPUT RESOLUTIONS: Native, 480p, 576p, 720P, 1080i, 1080p, 640x480, 800x600, 1024x768, 1280x800, 1280x1024, 1360x768, 1400x1050, 1440x900, 1600x900, 1600x1200, 1680x1050, and 1920x1200(RB)



- OUTPUT REFRESH RATE: 60Hz for computer graphics resolutions, 50/60Hz for HDTV resolutions, follow input
- PROCESSING DELAY: 20ms
- CONTROLS: Front panel buttons, ON and input LEDs
- POWER CONSUMPTION: 5.2V DC, 630mA
- OPERATING TEMPERATURE: 0° to +40°C (32° to 104°F)
- STORAGE TEMPERATURE: -40° to +70°C (-40° to 158°F)
- HUMIDITY: 10% to 90%, RHL non-condensing
- INCLUDED ACCESSORIES: Power supply

12) Matrice 8x8 HDMI 4K, HDR (tipo TVONE MX6588)

- HDMI compliance HDMI 2.0a
- HDCP compliance HDCP 1.4/HDCP 2.2
- Video bandwidth Single-link 594MHz [18Gbps]
- Video support HDR 4K2K@60 (4:2:0 10bits) 4K2K@60 (4:4:4 8bits)
- Audio support Surround sound (up to 7.1 channels) or stereo digital audio
- Input
 - 8 x HDMI (MX-6588)
 - 4 x HDMI (MX-6544)
 - 1 x 9-pin D-sub Female (RS-232)
 - 1 x Ethernet
 - 1 x 3.5mm IR receiver
 - 1 x USB Type A (Firmware only)
- Output
 - 8 x HDMI (MX-6588)
 - 4 x HDMI (6544)
- Control
 - Via Front panel button, IR remote control, RS-232 control, TCP/IP and MX-tools
- IR remote control
 - $\pi = 25^\circ$ Carrier frequency: kHz Replacement Part; IRC-6
- Warranty
 - 2 Years
- MTBF (hrs)
 - MX-6588 51,000 MX-6544 103,000
- Mechanical
 - i. Enclosure Metal case
 - ii. Power supply 12V 7.5A DC Replacement part; PS-12-75-IEC-LK
 - iii. Power consumption 60 Watts (max)
 - iv. Operating Temp 0° to 40°C (32° to 104°F)
 - v. Relative Humidity 20% to 90% Non-condensing
 - vi. Storage Temp -20° to 60°C (-4° to 140°F)
 - vii. Regulatory compliance FCC, CE, RoHS, UL

13) Cavo di prolunga in fibra HDMI 4K - 60m (tipo Purelink FX-I350-060)

- Caratteristiche e prestazioni
 - i. Active optical fiber transmission at full 18 Gbps bandwidth
 - ii. Resolutions up to 4K@60Hz 4:4:4 incl. HDR 10, HDR 12 and Dolby Vision
 - iii. HDMI 2.0, HDMI 1.x and DVI 1.0 compliant
 - iv. HDCP 2.2, HDCP 1.4 compliant
 - v. Supports CEC and transparent EDID
 - vi. Zero frame delay, no latency, no compression
 - vii. Hybrid Construction, super lightweight, small bend radius, compact design
 - viii. Supports all HDMI audio formats incl. Dolby TrueHD and DTS-HD Master Audio
 - ix. Kevlar reinforced sheath
 - x. Easy Plug & Play installation



xi. Metal housing for optimized EMI protection

14) MIXER COMPATTO 6 CANALI CON MULTIEFFETTO (+1 AUDIO USB dal Podio) (tipo Monacor ZZMXBTE6)

- 4 ingressi mic + 1 stereo Line
- Interfaccia USB audio integrata
- (Permette la connessione a PC/Mac in registrazione e in riproduzione)
- Connettività Bluetooth
- Alimentazione phantom +48V
- Equalizzatore british a 3 bande su ogni canale
- Unità multieffetto DSP integrata con 16 effetti
- Indicatore di livello master a 5 LED
- Uscita cuffie
- Uscita control
- Send/Return
- Ingresso MIC XLR
- Risposta in frequenza 20-20'000Hz
- Gain Range più10/più60 dB
- Livello MAX di ingresso 12dBu @10dB Gain
- Impedenza 26KO
- Ingresso LINE Jack Bil/sbil 6.3mm TRS
- Impedenza 20KO bilanciato
- Gain Range meno10/più40dB
- Livello MAX di ingresso 30 dBu
- EQ canale Alti 12KHz/15Db; Medi 2.5KHz/15dB; Bassi 80Hz/15dB
- Uscita MAIN Jack 6.3mm 2400
- Uscita CUFFIA Jack stereo
- Freq. di campionamento 40KHz
- Alimentazione 230V 50/60Hz

15) MIXER AMPLIFICATORE 240W (tipo Monacor PA-924)

Mono PA mixing amplifier

- 1 x 240 W
- 4 balanced microphone inputs and line inputs with selectable priority
- 4 stereo line inputs
- Speaker outputs via screw terminals
- Balanced line output
- Record output
- Insert facility, e.g. for effect units, equalizers, feedback controllers
- 2-tone or 4-tone chime, can be activated externally
- Input level control and output level control
- 2-way tone control for the output
- Switchable 48 V phantom power for microphone inputs
- Temperature-controlled fan
- Mains operation or 24 V emergency power operation
- Removable mounting brackets

Technical specifications

- Peak output power 340 W
- Power rating 240 W



- Channels 5
- Inputs 2.5-100 mV (mic), 350 mV (line)
- Frequency range 50-16,000 Hz
- Equalizer bass ± 10 dB/100 Hz
- Equalizer treble ± 10 dB/10 kHz
- S/N ratio > 75 dB
- THD $< 0.1\%$
- Mains voltage ~ 230 V
- Mains frequency 50 Hz
- Power consumption, operation 640 VA
- Operating voltage (possible alternative) DC 24 V
- Power supply (possible alternative) DC 18 A
- Admiss. ambient temp. 0-40 °C
- Rack spaces, RS 2
- Connections
 - i. 4 x XLR (mic),
 - ii. 4 x RCA L/R (line),
 - iii. 1 x XLR (line out),
 - iv. 1 x RCA L/R (line out),
 - v. screw terminals (speakers)

16) COLONNA SONORA IN LEGNO 100V - 60W (tipo Monacor ETS-360TW/WS)

- Active/passive passive
- Transmission method 100 V
- Power rating (RMS) 60/30/15 W
- Frequency range 90-19,000 Hz
- Bass speaker 2
- Midrange speaker 4
- Tweeter 1
- Number of speakers 6+1
- Sensitivity 94 dB/W/m
- Mounting device mounting brackets
- Admiss. ambient temp. 0-40 °C

Aula livello avanzato

1) Podio docente con PC e schermo multitouch 55"

- Podio interattivo dal telaio in acciaio con ruote frenabili
- Schermo multi touch
 - i. DIAGONALE SCHERMO 54,6", Matrice Attiva TFT LCD (LED)
 - ii. TECNOLOGIA TOUCH PCAP (TouchPro® Projected Capacitive) - 12 Touch
 - iii. RISOLUZIONE MASSIMA 1920 x 1080 60Hz
 - iv. MOVIMENTAZIONI Mediante attuatori elettrici
 - v. LUMINOSITÀ 450 cd/m²
 - vi. CONTRASTO 1100:1
 - vii. COLORI 16.7 milioni
 - viii. TEMPO DI RISPOSTA 8 ms
 - ix. ANGOLO DI VISUALE Orizzontale: $\pm 89^\circ$ or 178° total, Verticale: $\pm 89^\circ$ or 178° total
 - x. PROCESSORE Intel Core I7



xi. MEMORIA	4GB
xii. SCHEDA VIDEO	Dedicata, 1GB DDR3
xiii. STORAGE	HDD SSD Technology
xiv. CONNESSIONI	Usb, Gigabit Lan, Wireless 802.11 b/g/n
xv. S.O.	Windows 10
xvi. I/O ESTERNE	1x LAN; 1 x USB 3.0

2) Sistema Multiview 4ch HDMI Ris . Input 1920x1080 @60p

3) MICROFONO DA TAVOLO WIRELESS CON TRASMETTITORE MULTIFREQUENZA (tipo Monacor TXS-606DT)

- Description desktop microphone transmitter
- Transmission method wireless
- Polar pattern cardioid
- System electret
- Carrier frequency range 672.000-696.975 MHz
- Transmitting power 25 mW/2.5 mW
- Power supply 2 x 1.5 V batt. AA size
- Operating time > 8 h
- Audio frequency range 30-18,000 Hz
- Admiss. ambient temp. 0-40 °C

4) TRASMETTITORE MICROFONO A CLIP MULTIFREQUENZA, 667.000-691.750 (tipo Monacor TXS-606LT)

- General information
 - i. Description pocket transmitter
 - ii. Carrier frequency range 672.000-696.975 MHz
 - iii. Audio frequency range 30-18,000 Hz
 - iv. Channels 1
 - v. Operating time > 8 h
 - vi. Admiss. ambient temp. 0-40 °C
- Specifications transmitter
 - i. Transmitting power 10 mW
 - ii. Power supply transmitter 2 x 1.5 batt. AA size
 - iii. Connections transmitter 1 x 3.5 mm jack

5) RICEVITORE MULTIFREQUENZA A 4 CANALI, 67 2.000-696.975 MHZ (tipo Monacor TXS-646)

- 1000 canali UHF regolabili (672,000-696,975MHz) in 10 gruppi da 100 canali cad.
- funzione ACT per trasmettere la frequenza scelta dal trasmettitore tascabile TXS-606LT o dal microfono a mano TXS-606HT tramite segnali a infrarossi
- ricerca canali automatica
- sistema True-Diversity con antenne staccabili (connettori BNC)
- volume e squelch regolabili
- spia a LCD per gruppo/canale, antenna A/B, livello trasmissione HF e livello NF audio e spia a LED supplementare del livello audio
- uscita XLR per canale, bil.
- uscita jack 6,3mm per il segnale miscelato
- contenitore robusto di metallo
- alimentatore in dotazione
- montaggio in rack 482 mm (19"), 1 U



- Frequenza portante: 672,000-696,975MHz
- RF Rapporto S/R: 105dB
- Campo di frequenze audio: 30-18000Hz
- Fattore di distorsione: < 0,5%
- Campo dinamico: 120dB
- Uscita audio: 350mV/6000 (jack) 25mV/6000 (XLR, bil.)
- Temp. di esercizio ammessa: 0-40 °C
- Alimentazione: tramite alimentatore in dotazione

6) N. 1 - MICROFONO A GELATO (tipo Monacor TXS-606HT)

- Description hand-held microphone transmitter
- Transmission method wireless
- Polar pattern cardioid
- System dynamic
- Carrier frequency range 672.000-696.975 MHz
- Transmitting power 25 mW/2.5 mW
- Power supply 2 x 1.5 V batt. AA size
- Operating time > 8 h
- Audio frequency range 30-18,000 Hz
- Admiss. ambient temp. 0-40 °C

7) Videocamera brandeggiabile Full HD Camera, 1920x1080p 60 fps, 20x optical zoom (tipo Lumens VC-A50P)

- Sensor: 1/2.8" 2MP CMOS
- Video Output:
 - i. 1080p 60 / 59.94 / 50 / 30 / 29.97 / 25 fps,
 - ii. 1080i 60 / 59.94 / 50 fps,
 - iii. 720p 60 / 59.94 / 50 fps
- Optical Zoom: 20x
- Panning Angle: -170° ~ +170°
- Tilting Angle: -30° ~ +90°
- Preset Positions: 128
- Video Output (HD) Interface: 3G-SDI, HDMI, Ethernet
- Video Stream: RTSP / RTMP
- PoE: PoE+ (IEEE802.3at)
- Camera Control Interface: RS-232 / RS-422 / Ethernet
- Camera Control Protocol: VISCA / PELCO D / ONVIF
- Video S/N Ratio: > 50dB
- Shutter Speed: 1/1 ~ 1/10,000 sec
- Focal Length: f = 4.7 ~ 94 mm
- Video Compression: MJPEG, H.264 / SVC
- 3D NR: Yes
- Horizontal Viewing Angle: 63°
- Aperture: F1.6 ~ F3.5
- Minimum Illumination: 1.0 lux (F1.6, 50IRE, 30fps)
- Minimum Object Distance: 1.2m



- Gain Control: Auto, manual
- White Balance: Auto, indoor, outdoor, one-push, manual
- Exposure Control: Auto, manual
- Focus System: Auto, manual
- Image Flip: Yes
- Audio Input: Line In / MIC In
- Audio Output: Ethernet, SDI and HDMI
- Power consumption: Power On : 16W, Standby : 12W

8) Acquisizione USB Capture HDMI Gen 2 - HDMI + Embedded Audio (Tipo Magewell 32060)

- Supported OS: Windows, Linux (support x86, x64 & ARM architecture), Mac, Chrome OS
- Supported APIs:
 - Windows: DirectShow, Wave API/DirectSound/WASAPI
 - Linux: V4L2, ALSA
 - macOS: AVCaptureSession, AudioUnit
- Supported Software: VLC, VirtualDub, OBS, XSplit, vMix, VidBlaster, Wirecast, Microsoft Media Encoder, Adobe Flash Media Encoder, Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software
- Input Interfaces HDMI: DVI-D 1.0, HDMI 1.4a
- Host Interface USB 3.0: compatible with USB 2.0, compatible with USB 3.1 Gen 1
- Input features: Support for input video resolutions up to 2048x2160
- HDMI Specific Features:
 - i. 165MHz HDMI receiver
 - ii. Adaptive HDMI equalizer support for cables lengths up to 30M
 - iii. Support for customized EDID
 - iv. Support for extraction of AVI/Audio/SPD/MS/VS/ACP/ISRC1/ISRC2/Gamut InfoFrames
 - v. Full colorimetry support
 - vi. Support for 8/10/12-bit color depth
 - vii. Support for RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
 - viii. Support for 2 channel IEC60958 audio streams
 - ix. Support for extraction of audio formation information & channel status data
 - x. Support for extraction of video timing information
 - xi. Support for extraction of 3D format information
 - xii. Support for Side-by-Side Half, Top-and-Bottom, Frame Packing 3D mode.
- Video Capture format:
 - i. Support for capture resolutions up to 2048x2160
 - ii. Support for capture frame rates up to 120fps (Actual capture frame rate can be limited by the USB bandwidth and internal working frequency. Typical capture frame rates on the Intel USB3.0 controller are as follows.)
 - 1. 1920x1080 YUY2 (up to 75fps)
 - 2. 1920x1080 RGB24 (up to 60fps)
 - iii. Support for YUY2 & UYVY 4:2:2 8-bit



- iv. Support for RGB24 & RGB32 4:4:4 8-bit
- v. The default capture format is YUY2. More capture formats can be set using USB Capture Utility.
- Video Processing Features:
 - i. Video processing pipelines with 160 Mpixels/s processing bandwidth
 - ii. Video cropping
 - iii. Video scaling
 - iv. Video de-interlacing
 - 1. Weave
 - 2. Blend top & bottom field
 - 3. Top field only
 - 4. Bottom field only
 - v. Video aspect ratio conversion
 - 1. Auto or manual selection of input aspect ratio
 - 2. Auto or manual selection of capture aspect ratio
 - 3. Three aspect ratio conversion modes: Ignore (Anamorphic), Cropping or Padding (Letterbox or Pillarbox)
 - vi. Video color format conversion
 - 1. Auto or manual selection of input color format & quantization range
 - 2. Auto or manual selection of capture color format, quantization range & saturation range
 - 3. Support for RGB, YCbCr 601, YCbCr 709 color formats
 - 4. Support for Limited or Full quantization range
 - 5. Support for Limited, Full & 'Extended gamut' saturation range
 - vii. Video frame rate conversion
 - viii. Vertical flip and mirror
- Multiple devices on one computer: Support for connecting multiple USB devices to one system, Support for setting the device serial number as the device name shown in the system using USB Capture Utility
- SDK: The USB Capture SDK provide functions including signal status extraction, capture configuration and real-time audio & video capture, etc.
- Firmware Upgrade: Multiple devices in one system can be upgraded simultaneously
- LED Indicator: Status LEDs indicate the working state of each channel:
 - 1. Pulsing slowly: idle
 - 2. On: input signal locked
 - 3. Off: input signal unlocked
 - 4. Double blinks: memory failed or FPGA configuration failed
- Accessories: USB 3.0 cable
- Power Consumption: 5V max current: ~0.5 A, max power consumption: ~2.5 W
- Working Environment:
 - i. Operating temperature: 0 to 50 deg C
 - ii. Storage temperature: -20 to 70 deg C
 - iii. Relative Humidity: 5% to 90% non-condensing



9) Sistema di presentazione e collaborazione wireless (tipo Barco WePresent WiCS-2100)

- Sistema operativo
 - i. Windows 7, 8, 8.1, 10 e versioni successive
 - ii. Mac OS X, 10.9 e versioni successive
 - iii. Android 4.0 e versioni successive
 - iv. iOS 9 e versioni successive
- Supporto standard di settore nativo
 - i. Apple AirPlay
 - ii. Google Chromecast
- Uscita video 1 x HDMI
- Velocità fotogrammi fino a 30 fps
- Risoluzione uscita fino a 1080p
- Utenti collegati fino a 32 tramite Wi-Fi o 64 tramite LAN
- Sorgenti fino a 4 connessioni simultanee con layout schermo dinamico
- Uscite audio
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 - i. 1 x Ethernet LAN
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- Consumo energetico
 - i. Adattatore per alimentatore (DC 12V/2A)
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- Dissipazione calore 19 BTU/h
- Peso
 - i. 1000±5% g (con confezione)
 - ii. 344±5% g (senza confezione)
- Temperatura ambiente
 - i. Temperatura operativa: 0 °C -+40 °C
 - ii. Stoccaggio: -20 °C -+70 °C
- Umidità ambientale
 - i. Operativa: 85%
 - ii. Stoccaggio: 90% di umidità relativi

10) Scaler HDMI-HDMI (tipo Kramer VP 424)

- INPUT: 1 HDMI connector
- OUTPUT: 1 HDMI connector
- OUTPUT RESOLUTIONS: Native, 480p, 576p, 720P, 1080i, 1080p, 640x480, 800x600, 1024x768, 1280x800, 1280x1024, 1360x768, 1400x1050, 1440x900, 1600x900, 1600x1200, 1680x1050, and 1920x1200(RB)
- OUTPUT REFRESH RATE: 60Hz for computer graphics resolutions, 50/60Hz for HDTV resolutions, follow input
- PROCESSING DELAY: 20ms
- CONTROLS: Front panel buttons, ON and input LEDs



- POWER CONSUMPTION: 5.2V DC, 630mA
- OPERATING TEMPERATURE: 0° to +40°C (32° to 104°F)
- STORAGE TEMPERATURE: -40° to +70°C (-40° to 158°F)
- HUMIDITY: 10% to 90%, RHL non-condensing
- INCLUDED ACCESSORIES: Power supply

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- HDCP compliance HDCP 1.4/HDCP 2.2
- Video bandwidth Single-link 594MHz [18Gbps]
- Video support HDR 4K2K@60 (4:2:0 10bits) 4K2K@60 (4:4:4 8bits)
- Audio support Surround sound (up to 7.1 channels) or stereo digital audio
- Input
 - 8 x HDMI (MX-6588)
 - 4 x HDMI (MX-6544)
 - 1 x 9-pin D-sub Female (RS-232)
 - 1 x Ethernet
 - 1 x 3.5mm IR receiver
 - 1 x USB Type A (Firmware only)
- Output
 - 8 x HDMI (MX-6588)
 - 4 x HDMI (6544)
- Control
 - Via Front panel button, IR remote control, RS-232 control, TCP/IP and MX-tools
- IR remote control
 - $\pi = 25^\circ$ Carrier frequency: kHz Replacement Part; IRC-6
- Warranty
 - 2 Years
- MTBF (hrs)
 - MX-6588 51,000 MX-6544 103,000
- Mechanical
 - i. Enclosure Metal case
 - ii. Power supply 12V 7.5A DC Replacement part; PS-12-75-IEC-LK
 - iii. Power consumption 60 Watts (max)
 - iv. Operating Temp 0° to 40°C (32° to 104°F)
 - v. Relative Humidity 20% to 90% Non-condensing
 - vi. Storage Temp -20° to 60°C (-4° to 140°F)
 - vii. Regulatory compliance FCC, CE, RoHS, UL

12) Cavo di prolunga in fibra HDMI 4K - 60m (tipo Purelink FX-I350-060)

- Caratteristiche e prestazioni
 - i. Active optical fiber transmission at full 18 Gbps bandwidth
 - ii. Resolutions up to 4K@60Hz 4:4:4 incl. HDR 10, HDR 12 and Dolby Vision
 - iii. HDMI 2.0, HDMI 1.x and DVI 1.0 compliant
 - iv. HDCP 2.2, HDCP 1.4 compliant
 - v. Supports CEC and transparent EDID
 - vi. Zero frame delay, no latency, no compression
 - vii. Hybrid Construction, super lightweight, small bend radius, compact design
 - viii. Supports all HDMI audio formats incl. Dolby TrueHD and DTS-HD Master Audio
 - ix. Kevlar reinforced sheath
 - x. Easy Plug & Play installation
 - xi. Metal housing for optimized EMI protection



13) MIXER COMPATTO 6 CANALI CON MULTIEFFETTO (+1 AUDIO USB dal Podio) (tipo Monacor ZZMXBTE6)

- 4 ingressi mic + 1 stereo Line
- Interfaccia USB audio integrata
- (Permette la connessione a PC/Mac in registrazione e in riproduzione)
- Connettività Bluetooth
- Alimentazione phantom +48V
- Equalizzatore british a 3 bande su ogni canale
- Unità multieffetto DSP integrata con 16 effetti
- Indicatore di livello master a 5 LED
- Uscita cuffie
- Uscita control
- Send/Return
- Ingresso MIC XLR
- Risposta in frequenza 20-20'000Hz
- Gain Range più10/più60 dB
- Livello MAX di ingresso 12dBu @10dB Gain
- Impedenza 26KO
- Ingresso LINE Jack Bil/sbil 6.3mm TRS
- Impedenza 20KO bilanciato
- Gain Range meno10/più40dB
- Livello MAX di ingresso 30 dBu
- EQ canale Alti 12KHz/15Db; Medi 2.5KHz/15dB; Bassi 80Hz/15dB
- Uscita MAIN Jack 6.3mm 2400
- Uscita CUFFIA Jack stereo
- Freq. di campionamento 40KHz
- Alimentazione 230V 50/60Hz

14) MIXER AMPLIFICATORE 240W (tipo Monacor PA-924)

Mono PA mixing amplifier

- 1 x 240 W
- 4 balanced microphone inputs and line inputs with selectable priority
- 4 stereo line inputs
- Speaker outputs via screw terminals
- Balanced line output
- Record output
- Insert facility, e.g. for effect units, equalizers, feedback controllers
- 2-tone or 4-tone chime, can be activated externally
- Input level control and output level control
- 2-way tone control for the output
- Switchable 48 V phantom power for microphone inputs
- Temperature-controlled fan
- Mains operation or 24 V emergency power operation
- Removable mounting brackets

Technical specifications

- Peak output power 340 W
- Power rating 240 W
- Channels 5



- Inputs 2.5-100 mV (mic), 350 mV (line)
- Frequency range 50-16,000 Hz
- Equalizer bass ± 10 dB/100 Hz
- Equalizer treble ± 10 dB/10 kHz
- S/N ratio > 75 dB
- THD $< 0.1\%$
- Mains voltage ~ 230 V
- Mains frequency 50 Hz
- Power consumption, operation 640 VA
- Operating voltage (possible alternative) DC 24 V
- Power supply (possible alternative) DC 18 A
- Admiss. ambient temp. 0-40 °C
- Rack spaces, RS 2
- Connections
 - i. 4 x XLR (mic),
 - ii. 4 x RCA L/R (line),
 - iii. 1 x XLR (line out),
 - iv. 1 x RCA L/R (line out),
 - v. screw terminals (speakers)

15) COLONNA SONORA IN LEGNO 100V - 60W (tipo Monacor ETS-360TW/WS)

- Active/passive passive
- Transmission method 100 V
- Power rating (RMS) 60/30/15 W
- Frequency range 90-19,000 Hz
- Bass speaker 2
- Midrange speaker 4
- Tweeter 1
- Number of speakers 6+1
- Sensitivity 94 dB/W/m
- Housing material wood
- Colour white
- Mounting device mounting brackets
- Admiss. ambient temp. 0-40 °C