ARISTA IPC

KVM Extenders
for Industrial Harsh Environments

www.aristaipc.com

Contents

What is KVM Extender?

VM is an acronym for keyboard, video, and mouse in reference to computer ports. KVM Extender products are connected to these ports through which they extend computer signals. KVM extenders are for extending the keyboard, video, and mouse signals in situations where computers operate from a distant location. KVM extender includes a transmitter connected to keyboard, video, and mouse ports of computer along with a receiver connected at the remote keyboard, display and mouse.

Keyboards, video monitors, and/or mice are usually located within 6 feet or 2 meters of the source PC or thin client. However, there are times when you need to mount a display farther away from the source signal—sometimes in a different building or type of location, such as outdoors, on the process floor, and/or in a hazardous location. One solution is to use a keyboard video mouse (KVM) extender, which is essentially an extension cord for the KVM signals. Industrial KVM extenders allow users to access remote computers that are a couple hundred feet away and keep computers in the IT managed and climate-controlled area, like server room or non-harsh environment. Benefits of using KVM extender are space saving, eliminating the heat generated by computers or keeping computers away from harsh environment.
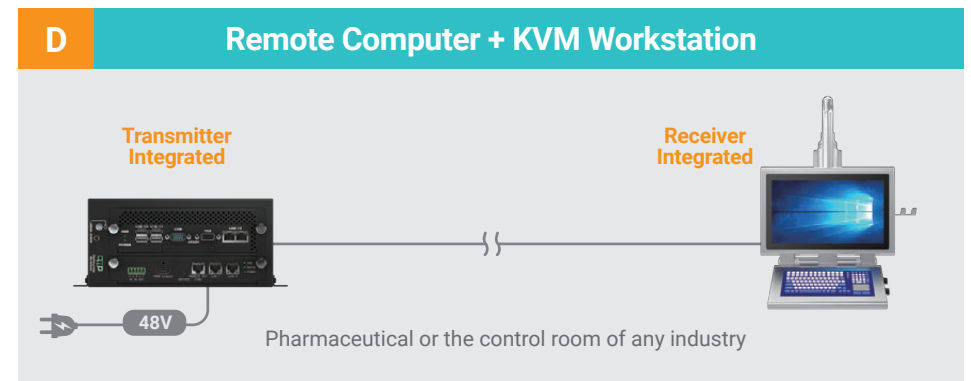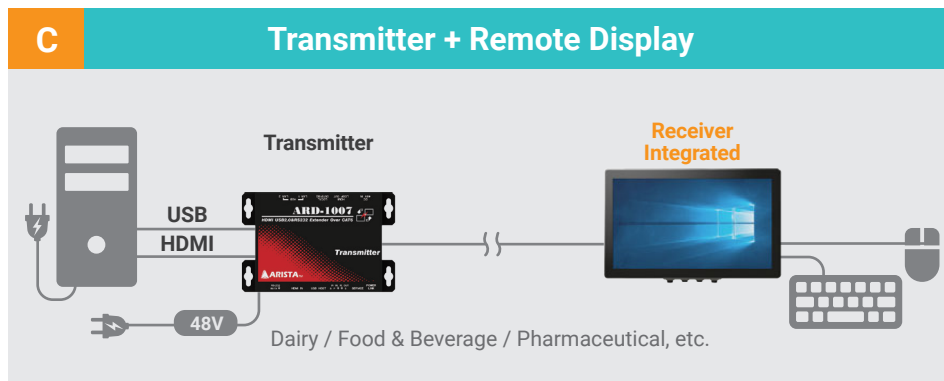
| Reduce Total Cost of Ownership | Saving Space | Saving Installation Efforts |

What product portfolio of KVM Extender does ARISTA provide?

ARISTA has recognized the needs of industrial rugged KVM extenders to meet the toughest environmental protection requirements in various harsh production floors. The products portfolio of ARISTA's extenders include extender, receiver besides DIN Rail Remote Computer and 1U Rack Mount Remote Computer with transmitter integrated. Both Remote Display and Remote KVM Workstation has receiver integrated into the display unit. The ARISTA KVM Extender solution contains the following four combinations:

A	KVM Extender : Transmitter + Receiver

Transmitter **Receiver**

USB
HDMI

ARD-1007 · *Transmitter*

ARD-1007 · *Receiver*

48V

Steel & metal related industries

B	Remote Computer + Receiver

Transmitter Integrated **Receiver**

ARD-1007 · *Receiver*

48V

Airpoart lighting control / Limited space in electrical panel

C	Transmitter + Remote Display

Transmitter **Receiver Integrated**

USB
HDMI

ARD-1007 · *Transmitter*

48V

Dairy / Food & Beverage / Pharmaceutical, etc.

D	Remote Computer + KVM Workstation

Transmitter Integrated **Receiver Integrated**

48V

Pharmaceutical or the control room of any industry

Features of the ARISTA's KVM Extender Solutions

1 **Local Video Loopback to support Mirror/ Clone Display**

ARISTA's transmitter provides local video loopback tosupport cloning or mirroring the control room display. The remote LCD monitor will display exactly the same contents that are displayed on the LCD monitor in the control room.

2 **Peripheral Support**

ARISTA's Extender extends HDMI video, RS-232, USB, and 10/100 LAN. ARISTA's Extenders extend pass-through USB signal which can support not only the keyboard, and mouse, but also supports touch screen, USB drives, and most of the USB devices.

3 **Power over Cable**

The transmitter of ARISTA's Extender and remote computers are Power Source Equipment (PSE) that provides power source via Cat5/6 cable. The receiver is Powered Device (PD) that is powered by PSE device and no external power supply is required. With power over cable capability, the receiver can be placed anywhere without a power source and makes the installation of the receiver much easy on the industrial production floor. The receiver of ARISTA's KVM Extender is capable to supply 12V/1A DC output which is handy when 12V/1A DC power source is needed. The transmitter of ARISTA's Extender and remote computers are capable to power ARISTA's Remote Displays and KVM Workstations with LCD display size in 21.5" or smaller. With ARISTA's transmitter, Remote Displays and KVM Workstations (21.5") won't need a power supply that makes installation effortlessly.

KVM Extender Architecture

ARISTA provides the traditional KVM Extender solution, which is to extend the distance of signal transmission through the two components Transmitter and Receiver. The HDMI, USB, RS-232 and Ethernet signals on the computer end are encoded by Transmitter, and the signal is transmitted to the Receiver at 330 feet (100 meters) through a CAT 5e/6 network cable. After the Receiver receives the signal and decoded, the keyboard and mouse connected to the USB port can be used to control the remote computer, and the display connected with the HDMI cable can display the screen of the remote computer.
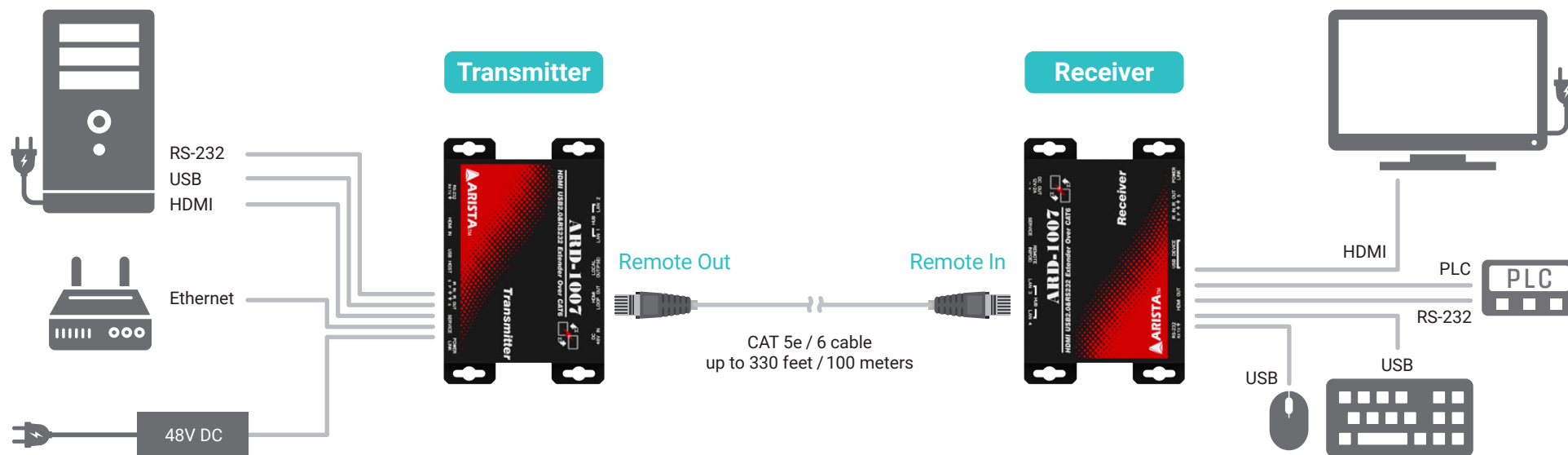
HDMI, USB, RS-232, and Ethernet signals on the computer end are encoded by Transmitter

Pass the signal to the receiver through a CAT 5e/6 network cable, up to 330 feet

After receiving, the receiver decodes the signal, connects to the keyboard and mouse connected to the USB port, and can use it to control the computer that is at a remote location. And the monitor is connected with the HDMI can show the screen of the computer that is far from here

KVM Extender Related Products

Transmitter Front-end I/O Ports

RS-232 Out USB Port Service

HDMI Out IR Remote Control (In/Out) LED Indicate

Transmitter Rear I/O Ports

48V DC Local Out

HDMI Loop Out LANE3 HUB LAN4

ARD-1007-A00-TX

USB HDMI over CAT 5e & CAT 6 KVM Extender - Transmitter

- Extension of video, Ethernet, and power, over a single CATx cable
- 10.2 Gbps of bandwidth on all channels
- Receiver is powered by PoE
- Transmitter provides up to 36W power over PoE
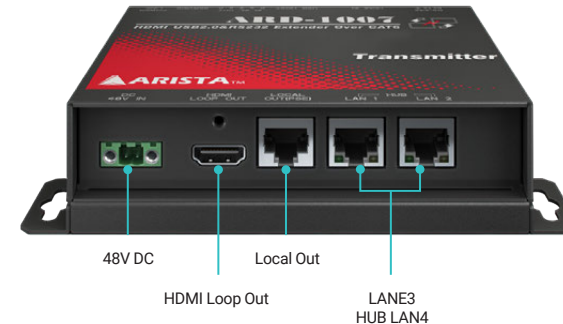
100 BaseT Ethernet Hub

ARD-1007-A00-TX Transmitter and ARD-1007-A00-RX Receiver have a two-port 100BasetT Ethernet Hub which supports Ethernet passthrough, which means Receiver's Ethernet ports will be able to access the same Network that is attached to Transmitter's Ethernet ports, and vice versa. This allows multiple IP devices or controllers to be connected at transmitter and receiver side.

HDMI Loop Back

You will find HDMI Loop-Back output very useful when you want to monitor the video source from the transmitter. ARD-1007-A00-TX has HDMI splitter built-in to provide HDMI video loopback output which allows you or your installer to display or monitor video source.

KVM Extender Related Products

Receiver Front-end I/O Ports

RS-232 out

HDMI out

USB device connector

IR Remote control (In/Out)

LED indicate

Receiver Rear I/O Ports

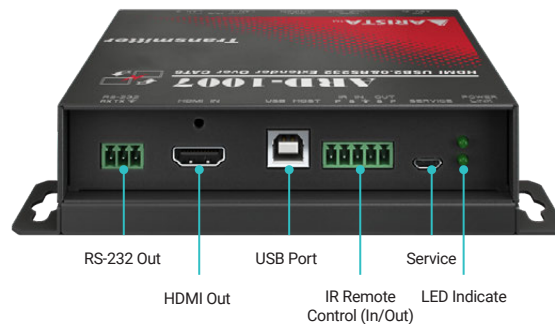

12 V DC Out

Service

Remote In (PSE)

LANE3 HUB LAN4
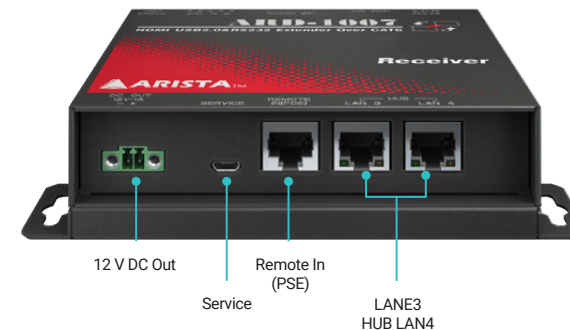
ARD-1007-A00-RX
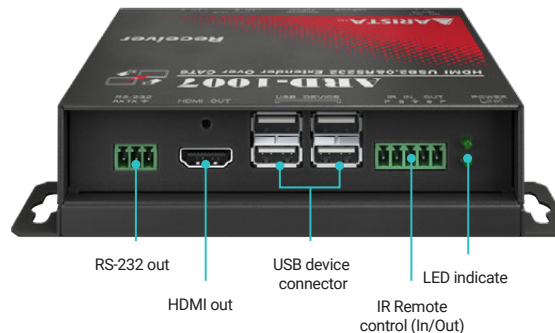
USB HDMI over CAT 5e & CAT 6 KVM Extender - Receiver

- Extension of video, Ethernet, and power, over a single CATx cable
- 10.2 Gbps of bandwidth on all channels
- Receiver is powered by PoE
- Transmitter provides up to 36W power over PoE

USB 2.0 Hub x 4

ARD-1007-A00-RX Receiver provides 4 -USB 2.0 ports. All 4 ports are backward compatible with USB 1.1 devices and comply with USB 2.0 specifications. Each USB 2.0 port provides up to up to 500 milliamps at 5 volts. The ARD-1007-A00-RX in-circuit power supply ensures enough capacity to power 4 USB devices simultaneously. These devices could be your USB Camera, USB Keyboard, USB Mouse, etc. This saves the trouble and expense of running additional power.

12V/1A DC Output

When used in conjunction with the ARD-1007- A00-TX, the ARD-1007-A00-RX is able to provide 12V/1A DC output for additional devices. This feature eliminates and simplifies cable.

Remote Computer + Receiver Architecture

ARISTA's remote computers are DIN Rail and 1U Rack Mount computers with an integrated transmitter to save space and bring HDMI, USB signals to remote locations up to 330 feet. ARISTA's DIN Rail remote computer, MicroBox-1200A-E01-A07-TX was designed for industrial applications that has industrial computers installed in limited space electrical enclosures, and LCD displays that are remotely located. ARISTA's 1U Rack Mount remote computer, RS-124-E01-A07-TX was designed for the space-limited control room, gym entrainment, and bedside entrainment in hospitals that want to keep computers away from end-users.
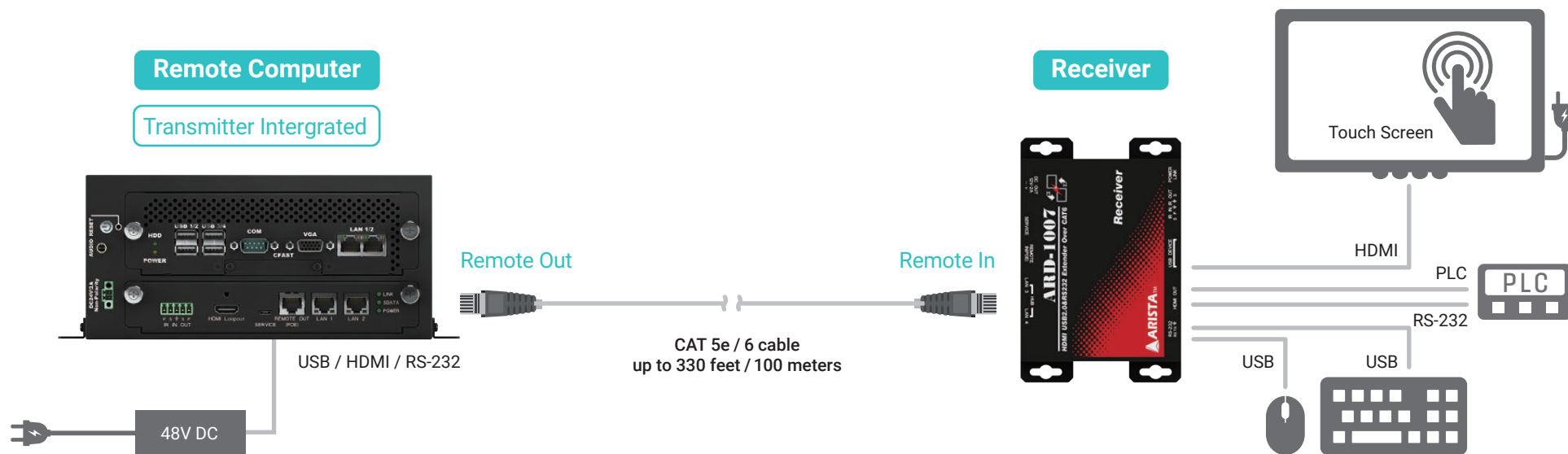
Remote Computer

Transmitter Intergrated

Receiver

Touch Screen

Remote Out

Remote In

HDMI

PLC

RS-232

USB / HDMI / RS-232

CAT 5e / 6 cable
up to 330 feet / 100 meters

USB   USB

48V DC

The remote computer integrates the transmitter, plugs in the CAT 5e/6 network cable, and encodes signals, such as HDMI, USB, RS-232, and so on.

Pass the signal to the receiver through a CAT 5e / 6 network cable, up to 330 feet

After receiving, the receiver decodes the signal, connects to the keyboard and mouse connected to the USB port, and can use it to control the computer that is at a remote location. And the monitor is connected with the HDMI can show the screen of the computer that is far from here.

Remote Computer Related Products
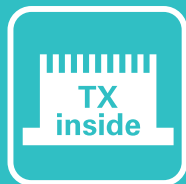
Remote Computer

Computer integrated Transmitter solution, suitable for Box PC on several occasions:

· Solutions for the limited space of the airport lighting control electric panel box
· Hospital patient bed Entertainment application, Computer moved to server room
· Rack Mount PC is mainly used in IT applications in the control room

MicroBOX-1200A

Box PC type Remote Computer with built-in Extender

· Computer and KVM extender all in one unit
· Extends computer's HDMI video, RS-232, USB signals to a remote location up to 330 feet
· Eliminates cables connection between transmitter and computer for quick Installation
· Save time and space
· Support power over cable to power remote receiver or remote display (**)
· Swappable modular design to obtain minimum maintenance and upgrade efforts requirement

RS-123-E01-A07

Rack Mount type Remote Computer with built-in Extender

· Computer and KVM extender all in one unit
· Extends computer's HDMI video, RS-232, USB signals to a remote location up to 330 feet
· Eliminates cables connection between transmitter and computer for quick Installation
· Save time and space
· Support power over cable to power remote receiver or remote display (**)
· Swappable modular design to obtain minimum maintenance and upgrade efforts requirement

Use Case Hospital Bed Entertainment Equipment

CAT 5e / 6 cable up to 330 feet / 100 meters

Hospital Ward

Control Room / Server Room

KVM Extender integrated Display

Rack Mount Remote Computer
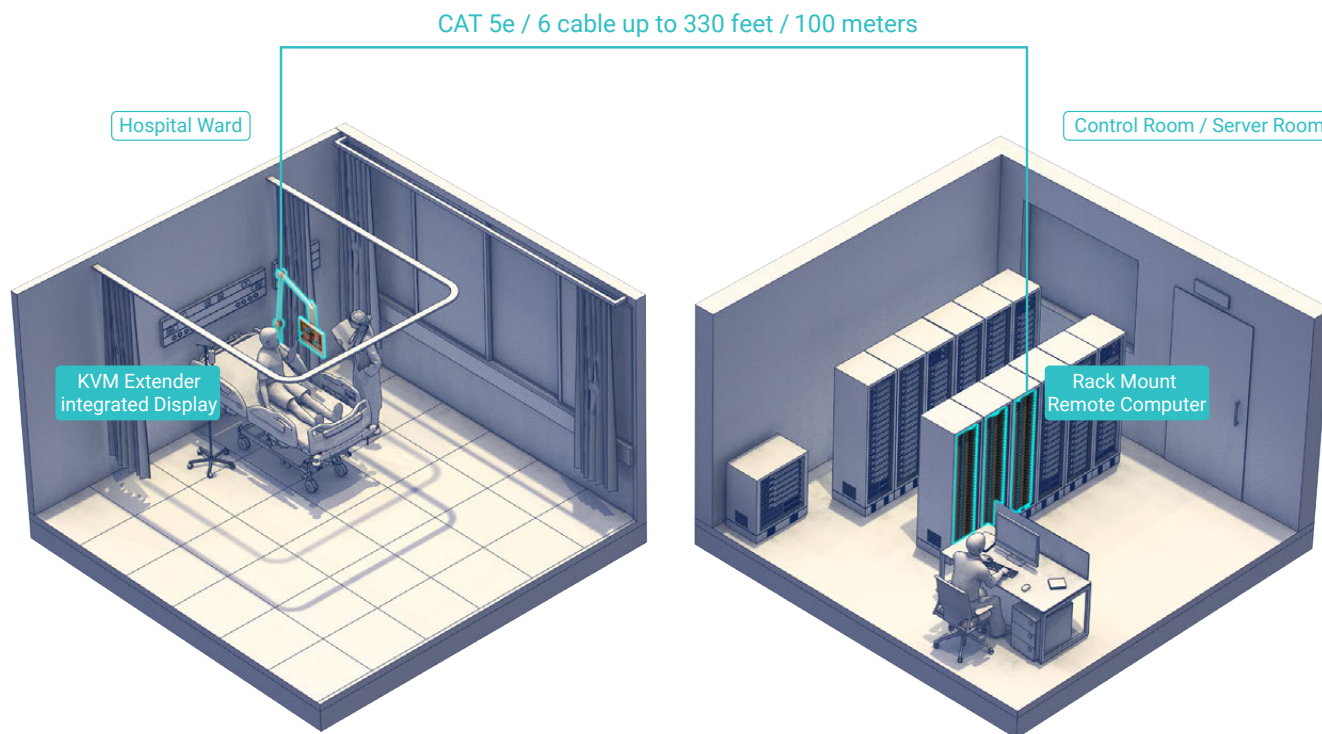
Hospital bed entertainment equipment application. Because the computer equipment in the ward needs to pass the medical regulations certification, when each single room bed is equipped with a display or KVM for entertainment information purposes, and the computer is set in the server room, there is no need to use a medical certification computer. This configuration improves the satisfaction of patients with medical services for hospitals, besides saving the cost of using expensive medical grade computer equipment.

Transmitter + KVM Extender Integrated Displays Architecture

The scenario when computers need to be in environment-controlled space, such as IT/server rooms, and HMI touch displays located in harsh production floor that needs to be rugged and meet various environmental protection requirements; ARISTA provides transmitters and remote displays to the extent the connection between computers and HMI touch displays up to 330 feet. ARISTA's remote displays are designed to meet IP50 and IP66 environmental protection requirements.
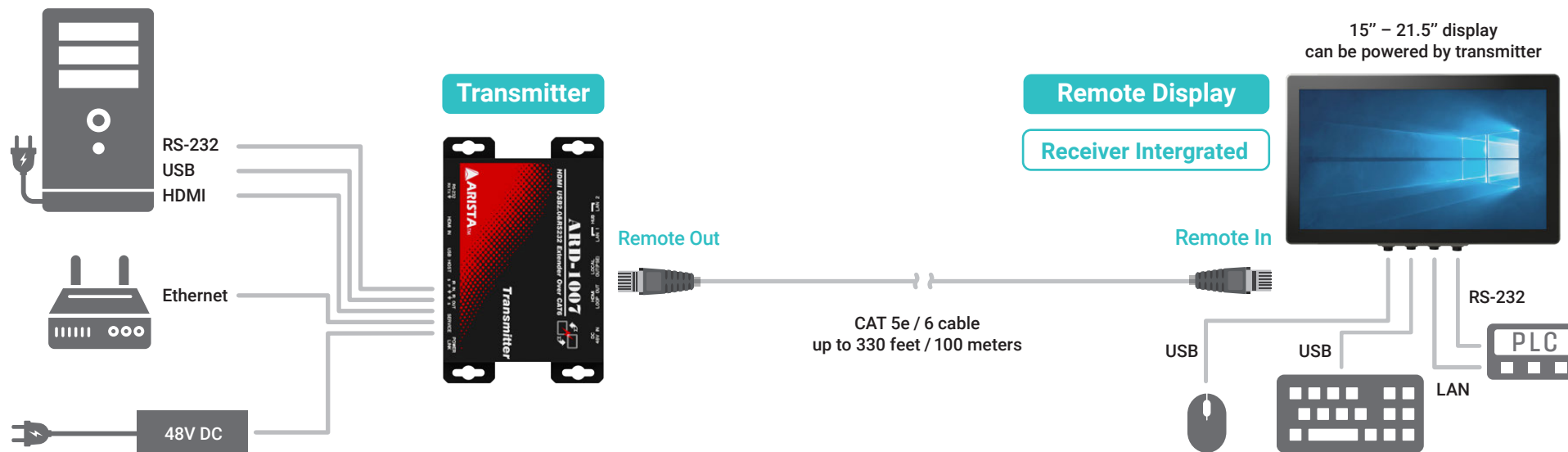
Transmitter

RS-232
USB
HDMI

Ethernet

Remote Out

48V DC

CAT 5e / 6 cable
up to 330 feet / 100 meters

15" – 21.5" display
can be powered by transmitter

Remote Display

Receiver Intergrated

Remote In

USB   USB   RS-232

PLC

LAN

HDMI, USB, RS-232, and Ethernet signals on the computer end are encoded by Transmitter

Pass the signal to the receiver through a CAT 5e / 6 network cable, up to 330 feet

- Computers can be kept in the controlled environment locations and away from harsh environments.
- It is future proof. Computers can be upgraded when it is required and display can be kept as is.

Remote Display integrates a receiver. After connecting the keyboard and mouse, you can control the computer that is located far from you. No need to purchase a receiver, more space-saving

KVM Extender Integrated Displays Related Products

IP66

Panel Mount

For customers who already own an electrical panel box or enclosure, but currently face the limited or insufficient internal space of the electrical panel box, which results in the inability to accommodate the computer and the need to separate the computer from the HMI. The Panel Mount Remote Display with an integrated receiver is used as the HMI device on the electrical panel box, which can solve the problem that the computer and HMI must be used separately due to space limitations or overheating of the chassis.

Options: ADM-1800AP Series / ADM-2100AP Series

IP50

VESA

VESA Mount

For industries requiring dust prevention, such as steel industry, logistics, dairy farming, etc., who are in the stage of building or renovating factories. In addition, customers who do not currently have an electrical panel box. Use VESA standard Remote Display, to meet a variety of installation, such as desktop, ceiling mount, wall mount and pedestal, and so on. At the same time, the purchase cost of the electrical panel box can be saved, and the original complicated installation works will be simple, and it has the advantages of saving wiring and installation efforts.

Suggested options: ADM-2100BP Series

IP66

NEMA 4X

IP66 Water Proof

When the equipment in the environment needs to be cleaned, the equipment must have an IP66 waterproof rating. Even in cleanrooms where hygienic control is required, and when acid-alkaline cleaners are used for disinfection, a remote display that meets NEMA 4X waterproof and corrosion-resistant stainless steel enclosures is an ideal choice. It is suitable for manufacturing industries such as pharmaceutical, chemical, and biotechnology.

Options: ADM-2121AX / ADM-5800AX Series / ADM-5842AX

LARGE

Large Format

In the past, the factory used a marquee display to show production or quality control information. But marquee display can only demonstrate numbers or text and cannot be graphical. Later, many manufacturers used ordinary large TVs to replace marquee displays. However, the TV has no protection against dust or water. TVs are often damaged in industrial environments. Therefore, management and maintenance units need to frequently purchase new TVs and spend high maintenance costs. Large Format Display with remote function not only reduce maintenance costs, but also show data from computers located elsewhere, and save wiring and maintenance.

Suggested options: ADM-2155BP / ADM-5842AX

Panel Mount KVM Extender Integrated Displays

IP66

Panel Mount
KVM Extender
Integrated Displays

For customers who already own an electrical panel box or enclosure, but currently face the limited or insufficient internal space of the electrical panel box. This results in the inability to accommodate the computer and the need to separate the computer from the HMI. The Panel Mount Remote Display with an integrated receiver is used as the HMI device on the electrical panel box, which can solve the problem when the computer and HMI must be used separately due to space limitations or overheating of the chassis.

ADM-1819AP-00A/00E

Panel Mount 19 inch KVM Extender Integrated LCD Display Monitor

- 19 inch LCD Display, 1280 x 1024 resolutions
- 5-Wire Resistive Touch Screen
- Powder Coated Aluminum or Stainless Steel Bezel
- Bezel meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

ADM-1821AP-00A/00E

Panel Mount 21.5 inch KVM Extender Integrated LCD Display Monitor

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- 5-Wire Resistive Touch Screen
- Powder Coated Aluminum or Stainless Steel Bezel
- Bezel meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

ADM-2119AP-00A/00E

Panel Mount 19 inch KVM Extender Integrated LCD Display Monitor

- 19 inch LCD Display, 1280 x 1024 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Anodized Aluminum or Stainless Steel Bezel
- Bezel meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

ADM-2121AP-00A/00E

Panel Mount 21.5 inch KVM Extender Integrated LCD Display Monitor

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Anodized Aluminum or Stainless Steel Bezel
- Bezel meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub
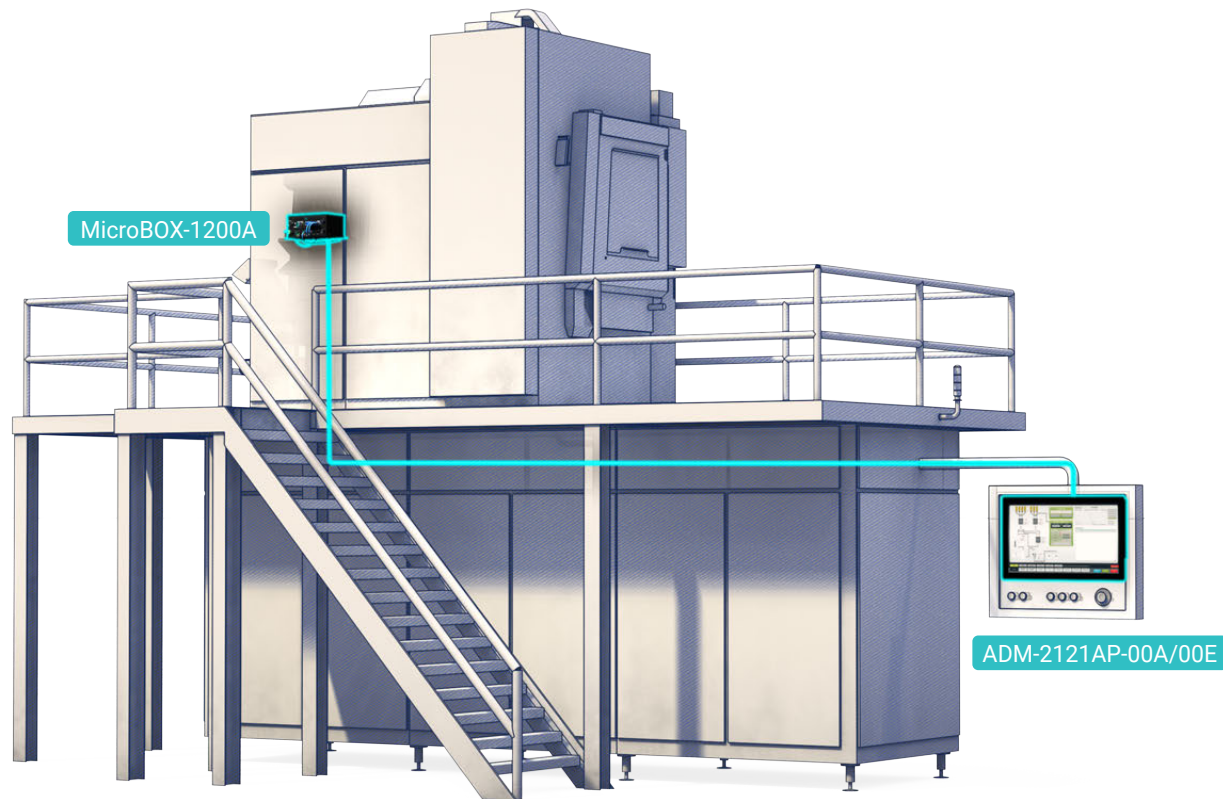- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

Use Case **Panel Mount KVM Extender Integrated Displays for PVD Coating Machine**

MicroBOX-1200A

ADM-2121AP-00A/00E

American professional PVD Coating Machine equipment supplier uses ARISTA's Panel Mount KVM Extender Integrated Displays ADM-2121AP-00A/00E. It meets the IP50 rating and the dust-proof requirements of coating sites. And the touch screen integrates the receiver. It separates the use of computer and touch screen. The computer is arranged in an electrical panel box. Through the long wiring setting, panel mount KVM Extender Integrated Displays realizes the application of KVM Extender on PVD coating machine.

VESA Mount KVM Extender Integrated Displays

IP50

VESA

VESA Mount
KVM Extender Integrated Displays

For industries requiring dust prevention, such as steel industry, logistics, dairy farming, etc., who are in the stage of building or renovating factories, or customers who do not currently have an electrical panel box. Use VESA standard Remote Display, to meet a variety of installation, such as desktop, ceiling mount, wall mount and pedestal, and so on. At the same time, the purchase cost of the electrical panel box can be saved, and the original complicated installation works will be simple, and it has the advantages of saving wiring and saving installation efforts.

ADM-2116BP-00A

VESA Mount 15.6 inch KVM Extender Integrated LCD Display Monitor

- 15.6-inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Black Color Enclosure
- Enclosure meets IP50 requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub

ADM-2118BP-00A

VESA Mount 18.5 inch KVM Extender Integrated LCD Display Monitor

- 18.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Black Color Enclosure
- Enclosure meets IP50 requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub

ADM-2121BP-00A

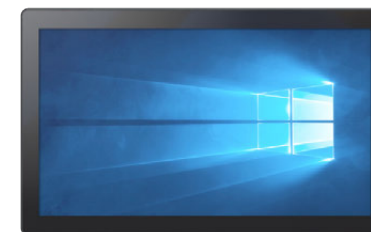VESA Mount 21.5 inch KVM Extender Integrated LCD Display Monitor

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Black Color Enclosure
- Enclosure meets IP50 requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
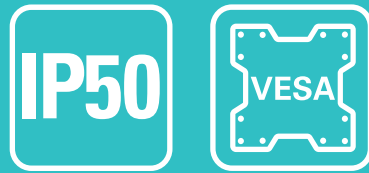- Built-in a 2-port 100BaseT Ethernet pass-through hub

VESA Mount KVM Extender Integrated Displays

VESA Mount
KVM Extender Integrated Displays

For industries requiring dust prevention, such as steel industry, logistics, dairy farming, etc., who are in the stage of building or renovating factories, or customers who do not currently have an electrical panel box. Use VESA standard Remote Display, to meet a variety of installation, such as desktop, ceiling mount, wall mount and pedestal, and so on. At the same time, the purchase cost of the electrical panel box can be saved, and the original complicated installation works will be simple, and it has the advantages of saving wiring and saving installation efforts.

ADM-2132BP-00A
VESA Mount 32 inch KVM Extender Integrated LCD Display Monitor

• 32 inch LCD Display, 1920 x 1080 resolutions
• Project Capacitive Touch Screen supports multi-touch
• Black Color Enclosure
• Enclosure meets IP50 requirements
• Single CAT6 cable connection to KVM Transmitter
• AC 100~240VAC Operating Voltage
• Built-in a 2-port USB 2.0 hub to support multiple USB devices.
• Built-in a 2-port 100BaseT Ethernet pass-through hub

ADM-2155BP-00A
VESA Mount 55 inch KVM Extender Integrated LCD Display Monitor

• 55 inch LCD Display, 1920 x 1080 resolutions
• Project Capacitive Touch Screen supports multi-touch
• Black Color Enclosure
• Enclosure meets IP50 requirements
• Single CAT6 cable connection to KVM Transmitter
• AC 100~240VAC Operating Voltage
• Built-in a 2-port USB 2.0 hub to support multiple USB devices.
• Built-in a 2-port 100BaseT Ethernet pass-through hub

17

Use Case **VESA Mount KVM Extender Integrated Displays for PVD Coating Machine**

MicroBOX-1200A
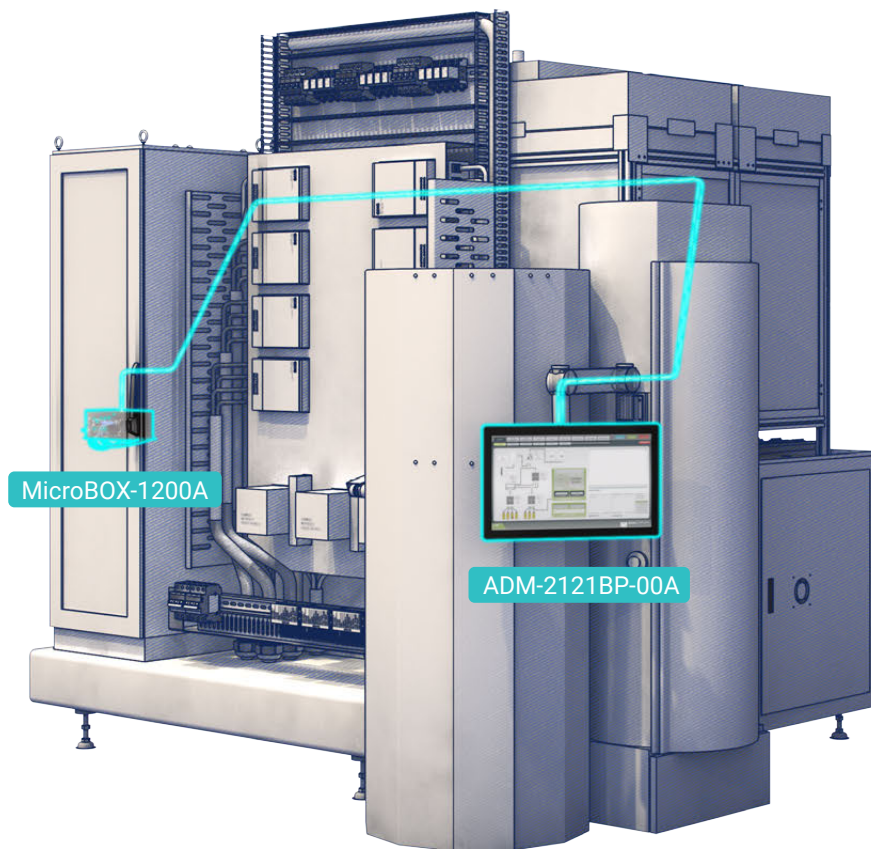
ADM-2121BP-00A

PVD Coating Machine Manufacturing Plant is preparing to set up a new production line. Because it already has its own Box PC and lacks HMI devices. For this reason, the manufacturer chose ARISTA ADM-2121BP-00A with IP50 dustproof rating as their HMI. It is a VESA Mount KVM Extender Integrated Displays that integrates a receiver. For customers, there is no need to purchase new electrical panel boxes and receivers, saving construction costs. Especially when the new plant is set up, it also makes construction and wiring easier and improved. The factory building process becomes more efficient.

Water Proof KVM Extender Integrated Displays

IP66 Water Proof
KVM Extender Integrated Displays

When the equipment in the environment needs to be cleaned, the equipment must have an IP66 waterproof rating. Even in cleanrooms where hygienic control is required, and when acid-alkaline cleaners are used for disinfection, a KVM Extender Integrated Displays that meets NEMA 4X waterproof and corrosion-resistant stainless-steel enclosures is an ideal choice. It is suitable for manufacturing industries such as pharmaceutical, chemical, and biotechnology.

ADM-2121AX-00A

Waterproof 21.5 inch KVM Extender Integrated LCD Display Monitor

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- 24VDC Operating Voltage
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through

## ADM-5842AX-00A

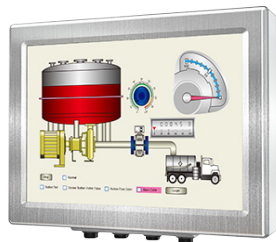Waterproof 42 inch KVM Extender Integrated LCD Display Monitor

- 42 inch LCD Display, 1920 x 1080 resolutions
- IR Touch Screen
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- 24VDC Operating Voltage
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through

Water Proof KVM Extender Integrated Displays

IP66

NEMA 4X

IP66 Waterproof
KVM Extender Integrated Displays

When the equipment in the environment needs to be cleaned, the equipment must have an IP66 waterproof rating. Even in cleanrooms where hygienic control is required, and when acid-alkaline cleaners are used for disinfection, a KVM Extender Integrated Displays that meets NEMA 4X waterproof and corrosion-resistant stainless-steel enclosures is an ideal choice. It is suitable for manufacturing industries such as pharmaceutical, chemical, and biotechnology.

ADM-5815AX-00A
Waterproof 15 inch KVM Extender Integrated LCD Display Monitor

- 15 inch LCD Display, 1024 x 768 resolutions
- 5-Wire Resistive Touch Screen
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

ADM-5817AX-00A
Waterproof 17 inch KVM Extender Integrated LCD Display Monitor

- 17 inch LCD Display, 1280 x 1024 resolutions
- 5-Wire Resistive Touch Screen
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

ADM-5819AX-00A
Waterproof 19 inch KVM Extender Integrated LCD Display Monitor

- 19 inch LCD Display, 1280 x 1024 resolutions
- 5-Wire Resistive Touch Screen
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through
- Hazardous Locations Certified (C1D2, ATEX, and IECEX Zone 2)

Large Format KVM Extender Integrated Displays

Large Format
KVM Extender Integrated Displays

In the past, the factory used a marquee display to show production or quality control information. But marquee display can only demonstrate numbers or text and cannot be graphical. Later, many manufacturers used ordinary large TVs to replace marquee displays. However, the TV has no protection against dust or water. TVs are often damaged in industrial environments. Therefore, management and maintenance units need to frequently purchase new TVs and spend high maintenance costs. Large Format KVM Extender Integrated Displays with remote function can not only reduce maintenance costs, but also show data from computers located elsewhere, and save wiring and maintenance.

ADM-5842AX-00AX

Waterproof 42 inch KVM Extender Integrated LCD Display Monitor

- 42 inch LCD Display, 1920 x 1080 resolutions
- IR Touch Screen
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- 24VDC Operating Voltage
- Built-in a 2-port USB 2.0 hub to support multiple USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through

ADM-2155BP-00A

VESA Mount 55 inch KVM Extender Integrated LCD Display Monitor

- 55 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Black Color Enclosure
- Enclosure meets IP50 requirements
- Single CAT6 cable connection to KVM Transmitter
- AC 100~240VAC Operating Voltage
- Built-in a 2-port USB 2.0 hub to support multiple USB · devices.
- Built-in a 2-port 100BaseT Ethernet pass-through hub

Use Case | KPI Visualization for Pharmaceutical

ARISTA provides Large Format KVM Extender Integrated Displays ADM-5842AX-00A. It is a 42-inch display that can be embedded in the wall, and the screen can be divided into four areas. If you want to execute KPI visualization applications in the production line, this solution's large format display delivers a clear picture of multiple data at the same time. It enables you to control all the tracked metrics. Furthermore, you can splice four ADM-5842AX-00A into one video wall and use it in a war room.

Remote Computer + KVM Workstation Architecture

ARISTA's DIN Rail and 1U Rack Mount remote computers with an integrated transmitter can save space and bring HDMI, USB signals to remote locations up to 330 feet. ARISTA's remote touch displays and workstations are designed to meet IP50 and IP66 environmental protection requirements. The use of ARISTA's remote computers along with remote touch displays and workstations can meet space-saving requirements in limited space electrical enclosures or limited space control room, at the same time, touch displays or workstations need to be located at remote locations in harsh environments.
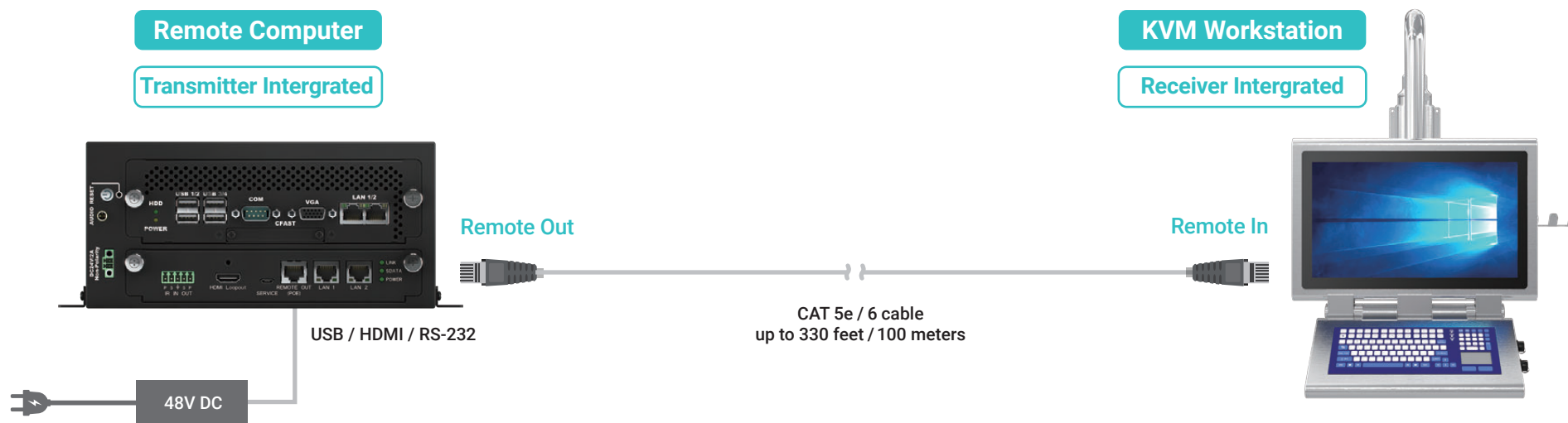
Remote Computer

Transmitter Intergrated

KVM Workstation

Receiver Intergrated

Remote Out

Remote In

USB / HDMI / RS-232

CAT 5e / 6 cable
up to 330 feet / 100 meters

48V DC

The remote computer integrates the transmitter, plugs in the CAT 5e/6 network cable, and encodes signals such as HDMI, USB, RS-232, and so on.

Pass the signal to the receiver through a CAT 5e/6 network cable, up to 330 feet

KVM Workstation integrates a receiver and a keyboard. You you can control the computer that is located far from you. It is the most space-saving.

KVM Workstation Related Products

IP66

NEMA 4X

IP66 Water Proof
KVM Workstation

When the environment often needs to be kept in a sterile state and cleaned and sterilized, the display, keyboard, mouse and other devices used must meet the waterproof and anti-corrosion levels. Even in cleanrooms where hygienic control is required, KVM workstations that meet NEMA 4X waterproof and anti-corrosion levels are ideal for disinfection using acid and alkaline cleaners. They are suitable for pharmaceutical, chemical, biotechnology, and paper pulp manufacturing.

Wall Mount with a platform for using mouse easily
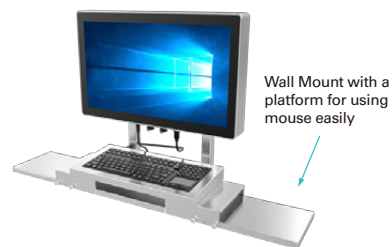
AMA-2121AX-KVM
Waterproof 21.5 inch KVM Extender Integrated Operator Station

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- 2x USB 2.0 ports available to support USB devices.
- Built-in a 1-port 100BaseT Ethernet pass-through
- 3x Keyboard and Pointing Device options
- Left and Right Mouse Tray

AMA-7421AX-KVM
Waterproof 21.5 inch KVM Extender Integrated Operator Station

- 21.5 inch LCD Display, 1920 x 1080 resolutions
- Project Capacitive Touch Screen supports multi-touch
- Waterproof Stainless Steel Enclosure
- Enclosure meets IP65 / NEMA 4X requirements
- Single CAT6 cable connection to KVM Transmitter
- True one-cable solution up to 100 meters CAT6 cable, no power supply is required
- 1x USB 2.0 ports available to support USB device.
- 3x Keyboard and Pointing Device options
- Pedestal Mount

Use Case **Device Cleaning and Sterilization for Pharmaceutical**
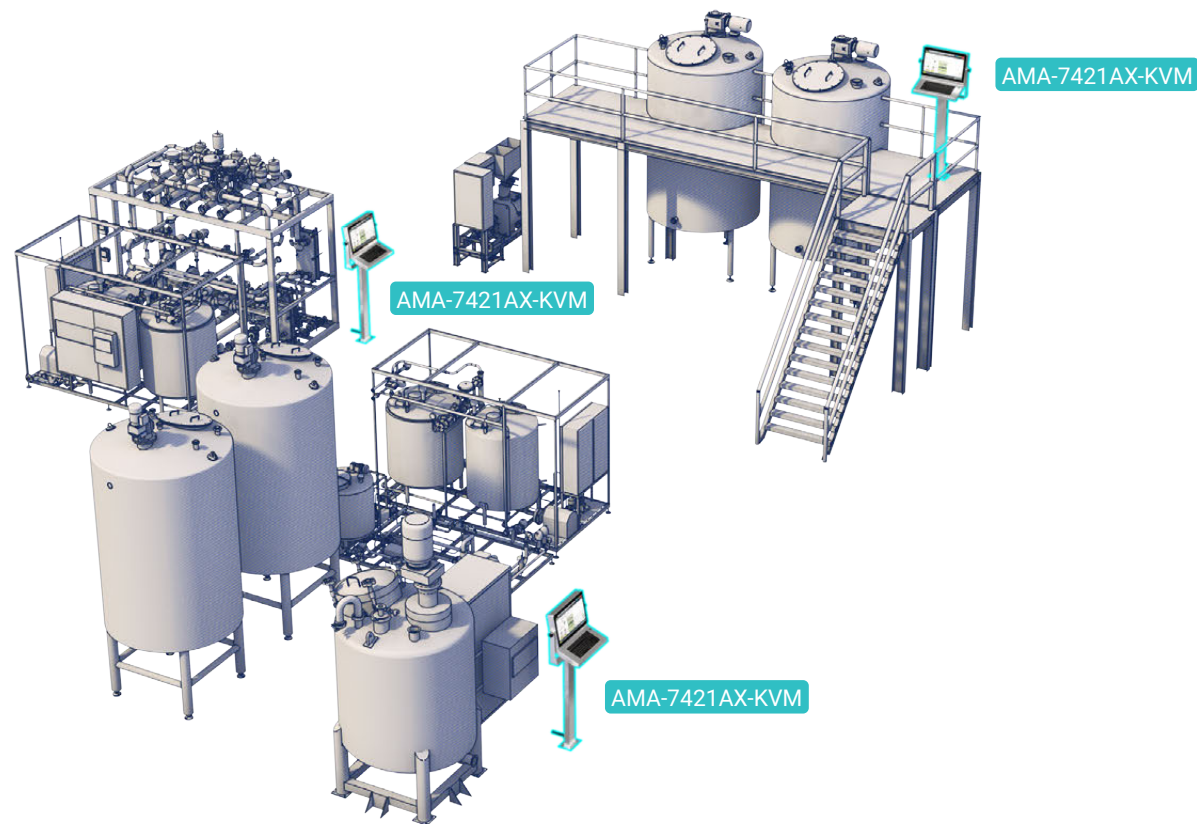
AMA-7421AX-KVM

AMA-7421AX-KVM

AMA-7421AX-KVM

When the equipment in the environment needs to be cleaned, the equipment must have an IP66 waterproof rating. Even in cleanrooms where hygienic control is required, and when acid-alkaline cleaners are used for disinfection, a KVM Extender Integrated Displays that meets NEMA 4X waterproof and corrosion-resistant stainless-steel enclosures is an ideal choice. It is suitable for manufacturing industries, such as pharmaceutical, chemical, and biotechnology.

Use Case KPI Visualization for Production Line

The automobile factory is large in scale and has long production lines. Managers need to understand the production information of the entire plant, including output, output and downtime. Each display on the production line displays the same information at the same time. Managers do not need to walk around to the control center to view the information.
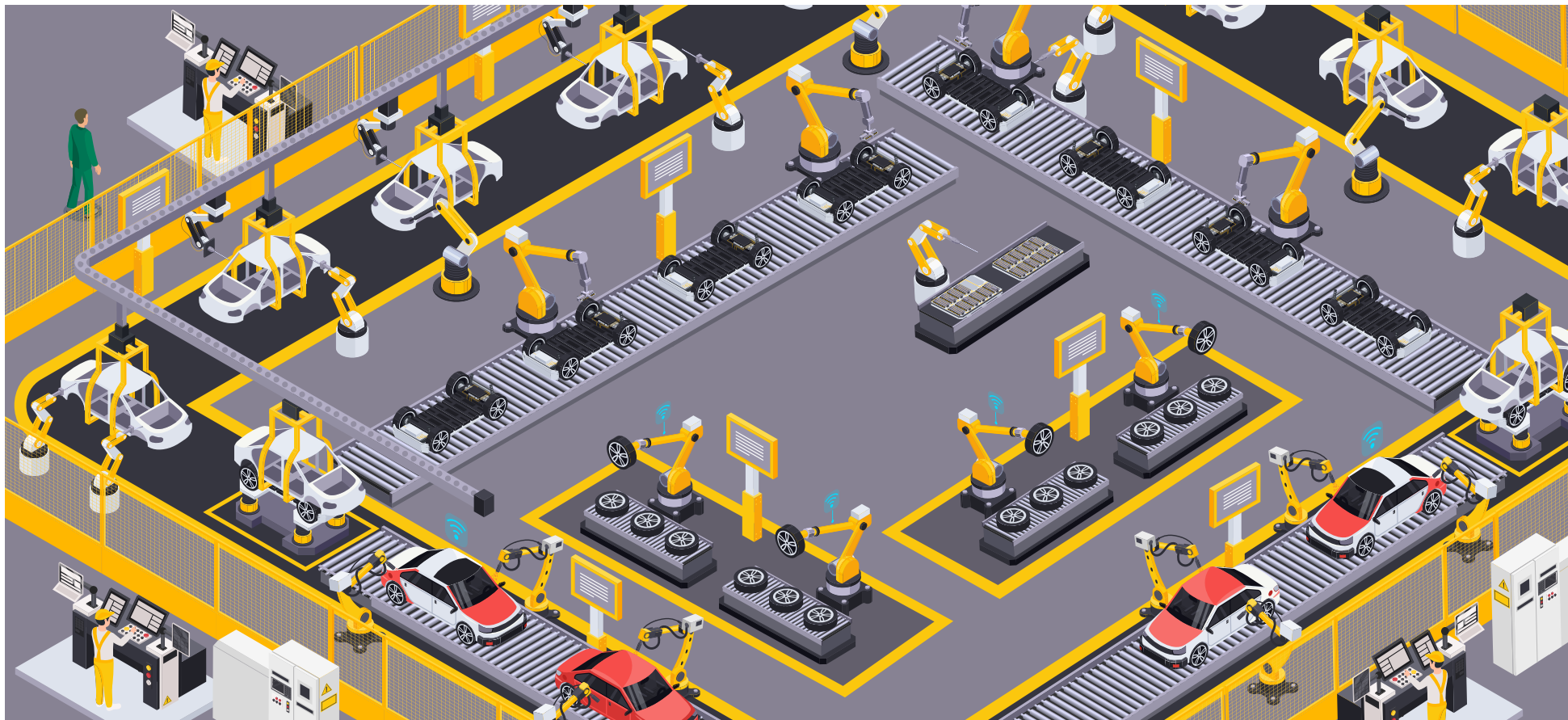
KVM Extender

Model	ARD-1007-A00-TX	ARD-1007-A00-RX
Role of Usage	Transmitter (TX)	Receiver (RX)
Video Bandwidth	350MHz	350MHz
Video Resolution	Up to 3840 x 2160	Up to 3840 x 2160
Transmission	Cat5e/Cat6 Cable	Cat5e/Cat6 Cable
Extension Signal	Video, Audio, remote control, touch control, keyboard/mouse, Ethernet, Power	Video, Audio, remote control, touch control, keyboard/mouse, Ethernet, Power
RS-232 Signal Type	Full-duplex & baud rate	Full-duplex & baud rate
Loop-Back	1 x HDMI Loop-Back at TX	1 x HDMI Loop-Back at TX
Input	1 x HDMI 2.0, 1 x USB 1 x RS-232, 1 x IR, 1 x 48V DC	1 x Remote IN (PSE)
Output	1 x Local out (PSE), 1 x HDMI 2.0	1 x HDMI 2.0, 1 x RS-232 4 x USB, 1 x IR, 1 x 12V DC
Ethernet Hub	2 x LAN	2 x LAN
HDMI Port	HDMI female	HDMI female
RS-232 Port	Terminal Block 3 Pin	Terminal Block 3 Pin
Keyboard and mouse connector	USB Type A	USB Type A
USB Port	USB Type A (ARD-1007-A00-RX), USB Type B (ARD-1007-A00-TX)	USB Type A (ARD-1007-A00-RX), USB Type B (ARD-1007-A00-TX)
Mounting	Wall mount or DIN-RAIL mount	Wall mount or DIN-RAIL mount
Dimension (W x H x D)	6.19 x 1.45 x 4.04 inch / 157.2 x 36.8 x 102.6 mm	6.19 x 1.45 x 4.04 inch / 157.2 x 36.8 x 102.6 mm
Power Supply	48V DC Power input	48V DC Power input
Operating Temp	0~50°C (32~122°F)	0~50°C (32~122°F)
Storage Temp	-20~60°C (-4~140°F)	-20~60°C (-4~140°F)
Humidity	0~95%	0~95%

KVM Extender Integrated Display

Panel Mount

| Model	ADM-1819AP-00A/00E	ADM-1821AP-00A/00E	ADM-2119AP-00A/00E	ADM-2121AP-00A/00E
Display Size	19 inch	21.5 inches	19 inch	21.5 inch
Resolution (Max)	1280 x 1024	1920 x 1080	1280 x 1024	1920 x 1080
Aspect Ratio	5:4	16:9	5:4	16:9
Response Time (Typical)	20 ms	14 ms	5 ms	14 ms
Contrast Ratio	700 : 1	1000 : 1	1000 : 1	1000 : 1
Brightness (Max)	450 nits	250 nits	450 nits	250 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	5-Wire Resistive	5-Wire Resistive	Projected Capacitive	Projected Capacitive
Touch Interface	USB via Transmitter	USB via Transmitter	USB via Transmitter	USB via Transmitter
USB Port	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
OS Support	WinXP Pro, Win XPe, Win 7	WinXP Pro, Win XPe, Win 7	Windows 7 & up	Windows 7 & up
Power Requirement (Max)	12VDC / 1.05A, 24VDC / 0.53A	12VDC / 1.23A, 24VDC / 0.61A	24VDC / 1.31A	24VDC / 0.93A
Power Consumption (Max)	12.6 W	15 W	32 W	23 W
Recommended Power Supply	18 W	21 W	45 W	32 W
Heat Dissipation	43 BTU / hr	51 BTU/hr	108 BTU/hr	77 BTU/hr
Mounting	Panel Mount	Panel Mount	Panel Mount	Panel Mount
Net Weight	17 Lbs / 7.71 Kgs	20 Lbs / 9.07 kg	15 Lbs / 6.80 Kg	16.9 Lbs / 7.67 kgs
Dimension (W x H x D)	17.80 x 14.60 x 2.39 (*3.72 inch / 452.1 x 370.8 x60.7 (*94.5) mm (*depth including power adaptor)	20.98 x 12.99 x 2.00 inch 533.0 x 330.0 x 50.8 mm	16.85 x 13.90 x 2.11 inch 428.0 x 353.0 x 53.6 mm	20.91 x 12.94 x 2.16 inch 531.0 x 328.8 x 54.9 mm
Recommended Cutout Dimension (W x H)	17.00 x 13.81 inch / 432.0 x 351 mm	19.92 x 12.35 inch / 506.0 x 313.7 mm	16.20 x 13.25 inch / 411.4 x 336.4 mm	20.09 x 12.13 inch / 510.2 x 308.0 mm
Operating Temp	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)
Storage Temp	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing	0~95%	0~95%
Enclosure	N/A	N/A	N/A	N/A
Rating	Bezel meets NEMA 4 / NEMA 4X requirements	Bezel meets NEMA 4 / NEMA 4X requirements	Bezel meets NEMA 4 / NEMA 4X requirements	Bezel meets NEMA 4 / NEMA 4X requirements
Certification	CE, UL 508	CE, UL 508	N/A	N/A

Remote Display

VESA Mount

Model	ADM-2116BP-00A	ADM-2118BP-00A	ADM-2121BP-00A
Display Size	15.6"	18.5 inch	21.5 inch
Resolution (Max)	1920 x 1080	1920 x 1080	1920 x 1080
Aspect Ratio	16:9	16:9	16:9
Response Time (Typical)	8 ms	20 ms	14 ms
Contrast Ratio	700 : 1	1000 : 1	1000 : 1
Brightness (Max)	400 nits	350 nits	250 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	Projected Capacitive	Projected Capacitive	Projected Capacitive
Touch Interface	USB via Transmitter	USB via Transmitter	USB via Transmitter
USB Port	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
OS Support	Windows 7 & up	Windows 7 & up	Windows 7 & up
Power Requirement (Max)	powered by Transmitter	powered by Transmitter	powered by Transmitter
Power Consumption (Max)	-	-	23 W
Recommended Power Supply	-	-	32 W
Heat Dissipation	-	-	77 BTU/hr
Mounting	VESA Mount	VESA Mount	VESA Mount
Net Weight	-	-	18.0 Lbs / 8.16 kgs
Dimension (W x H x D)	-	-	20.88 x 12.92 x 3.02 inch / 530.3 x 328.1 x 76.7 mm
Recommended Cutout Dimension (W x H)	-	-	N/A
Operating Temp	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)	0°C to 50°C (32°F to 122°F)
Storage Temp	-20°C to 60°C (-4°F to 140°F)	-20°C to 60°C (-4°F to 140°F)	-20°C to 60°C (-4°F to 140°F)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Enclosure	Metallic Housing	Metallic Housing	powder coated
Rating	Meets IP50	Meets IP50	Meets IP50
Certification	N/A	N/A	N/A

KVM Extender Integrated Display

VESA Mount
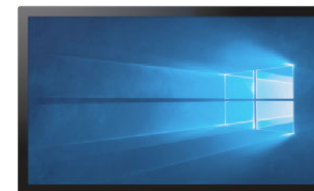
VESA Mount

Large Format

Model	ADM-2132BP-00A	ADM-2155BP-00A
Display Size	32 inch	55 inch
Resolution (Max)	1920 x 1080	1920 x 1080
Aspect Ratio	16:9	16:9
Response Time (Typical)	10 ms	6.5 ms
Contrast Ratio	3000 : 1	4000 : 1
Brightness (Max)	450 nits	500 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	Projected Capacitive	Projected Capacitive
Touch Interface	USB via Transmitter	USB via Transmitter
USB Port	2 x USB 2.0	2 x USB 2.0
OS Support	Windows 7 & up	Windows 7 & up
Power Requirement (Max)	110VAC/3.20A, 220VAC/1.60A	110VAC/3.20A, 220VAC/1.60A
Power Consumption (Max)	-	345W
Recommended Power Supply	-	N/A
Heat Dissipation	-	1,177 BTU/hr
Mounting	VESA Mount	VESA Mount
Net Weight	-	90 Lbs/ 41Kgs
Dimension (W x H x D)	-	50.85 x 30.02 x 3.25 inch / 1291.5 x 762.5 x 82.6 mm
Recommended Cutout Dimension (W x H)	N/A	N/A
Operating Temp	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)
Storage Temp	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing
Enclosure	Metallic Housing	powder coated
Rating	meets IP50	meets IP50
Certification	N/A	N/A

KVM Extender
Integrated Display

Waterproof

Model	ADM-5815AX-00A	ADM-5817AX-00A	ADM-5819AX-00A
Display Size	15 inch	17 inch	19 inch
Resolution (Max)	1024 x 768	1280 x 1024	1280 x 1024
Aspect Ratio	4:3	5:4	5:4
Response Time (Typical)	8 ms	30 ms	5 ms
Contrast Ratio	700:1	800:1	1000:1
Brightness (Max)	300 nits	350 nits	350 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	5-wire Resistive	5-wire Resistive	5-wire Resistive
Touch Interface	via Transmitter	via Transmitter	via Transmitter
USB Port	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
OS Support	Windows XP, Windows 7 & up	Windows XP, Windows 7 & up	Windows XP, Windows 7 & up
Power Requirement (Max)	powered by Transmitter	powered by Transmitter	powered by Transmitter
Power Consumption (Max)	11 W	21 W	21 W
Recommended Power Supply	15 W	29 W	29 W
Heat Dissipation	36 BTU/hr	70 BTU/hr	70 BTU/hr
Mounting	Pedestal/VESA/Wall/Ceiling/Benchtop	Pedestal/VESA/Wall/Ceiling/Benchtop	Pedestal/VESA/Wall/Ceiling/Benchtop
Net Weight	27 Lbs/ 12.24 kg	29 Lbs / 13.15 Kg	32 Lbs / 14.51 Kg
Dimension (W x H x D)	14.51 x 12.42 x 4.09 inch 368.6 x 315.5 x 103.9 mm	15.88 x 14.07 x 4.36 inch 403.4 x 357.4 x 110.7 mm	17.80 x 15.19 x 4.40 inch 452.1 x 385.8 x 111.8 mm
Recommended Cutout Dimension (W x H)	N/A	N/A	N/A
Operating Temp	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)	0 to 50°C (32 to 122°F)
Storage Temp	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Enclosure	SS 304/316L	SS 304/316L	SS 304/316L
Rating	meet NEMA 4X/ IP66	meet NEMA 4X/ IP66	meet NEMA 4X/ IP66
Certification	N/A	N/A	N/A

KVM Extender Integrated Display

Waterproof

Waterproof

Large Format

Model	ADM-2121AX-00A	ADM-5842AX-00A
Display Size	21.5 inch	42 inch
Resolution (Max)	1920 x 1080	1920 x 1080
Aspect Ratio	16:9	16:9
Response Time (Typical)	14 ms	8 ms
Contrast Ratio	1000:1	4000:1
Brightness (Max)	250 nits	500 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	Projected Capacitive	Infrared
Touch Interface	USB via Transmitter	USB via Transmitter
USB Port	2 x USB 2.0	2 x USB 2.0
OS Support	Windows XP, Windows 7 & up	Windows XP, Windows 7 & up
Power Requirement (Max)	powered by Transmitter	24VDC/6.83A
Power Consumption (Max)	21 W	164 W
Recommended Power Supply	29 W	234 W
Heat Dissipation	70 BTU/hr	559 BTU/hr
Mounting	Pedestal/VESA/Wall/Ceiling/Benchtop	VESA mount/Wall mount
Net Weight	20 Lbs/ 9.07 kg	110 Lbs/ 50 kg
Dimension (W x H x D)	22.89 x 13.74 x 1.93 inch 581.4 x 348.9 x 49.1 mm	42.87 x 27.29 x 5.38 inch 1089.0 x 693.05 x 136.1 mm
Recommended Cutout Dimension (W x H)	N/A	N/A
Operating Temp	0~50°C (32~122°F)	0~50°C (32~122°F)
Storage Temp	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing
Enclosure	SS 304/316L	SS 304/316L
Rating	meet NEMA 4X/ IP66	meet NEMA 4X/ IP66
Certification	N/A	N/A

Remote Computer

Box PC

Rack Mount

	Model	MicroBOX-1200A	RS-123-E01-A07
System	CPU	Intel E3845 1.91GHz	Intel E3845 1.91GHz
	Chipset	(By CPU)	(By CPU)
	Memory	up to 8GB DDR3 SO-DIMM	up to 8GB DDR3 SO-DIMM
	Video Controller	Intel Gen7 Graphics	Intel Gen7 Graphics
	Storage Option	2.5" SSD	2.5" SSD
	Remote Boot	ThinManager Ready, PXE	ThinManager Ready, PXE
Local I/O Communication	Video Output	HDMI Loopout, VGA (2nd Display)	HDMI Loopout, VGA (2nd Display)
	USB Port	4 x USB 2.0 (Local), 4-port USB Hub (Remote)	4 x USB 2.0 (Local), 4-port USB Hub (Remote)
	Serial Port	1x RS-232 Local, 1x RS-232 Remote	1x RS-232 Local, 1x RS-232 Remote
	LAN	2 x Gigabit (Local) or 1x Gigabit (Local)+2x 10/100 Hub (Remote)	2 x Gigabit (Local) or 1x Gigabit (Local)+2x 10/100 Hub (Remote)
OS Support	OS Support	Windows 10	Windows 10
Remote I/O Communication	Video Output	HDMI	HDMI
	USB Port	4-port USB Hub	4-port USB Hub
	Serial Port	1x RS-232	1x RS-232
	LAN	2-port 10/100 Ethernet Hub	2-port 10/100 Ethernet Hub
Power / Thermal Specs	Power Requirement (Max)	24VDC@4.2A	110VAC/1A, 220VAC/0.5A
	Power Consumption (Max)	90W	90W
	Heat Dissipation	307BTU/hr	307BTU/hr
Physical Information	Mounting	Wall Mount / DIN-Rail Mount	Rack Mount
	Net Weight	6.6 Lbs / 2.99 kgs	5.8 Lbs / 2.63 kgs
	Dimension (W x H x D)	9.80 x 4.02 x 5.37 inch / 249.0 x 102.0 x 136.4 mm	19.00 x 1.73 x 11.01 inch / 482.6 x 44.0 x 279.7 mm
Environmental	Operating Temperature	0-50ºC (32~122ºF)	0-50ºC (32~122ºF)
	Storage Temperature	-20~60ºC (-4~140ºF)	-20~60ºC (-4~140ºF)
	Relative Humidity	0~95%	0~95%
	Certification	N/A	N/A

KVM Workstations

IP66 Waterproof

Model	AMA-2121AX-KVM	AMA-7421AX-KVM
Display Size	21.5 inch	
Resolution (Max)	1920 x 1080 up to	1280 x 1024
Aspect Ratio	16:9	16:9
Response Time (Typical)	14 ms	14 ms
Contrast Ratio	1000:1	1000:1
Brightness (Max)	250 nits	250 nits
Video Input	HDMI via Transmitter	HDMI via Transmitter
Touch Screen	Projected Capacitive	Projected Capacitive
Touch Interface	USB via Transmitter	USB via Transmitter
USB Port	2 x USB 2.0	1 x USB 2.0
OS Support	Up to Windows 10	Windows 10
Power Requirement (Max)	Powered by Transmitter	Powered by Transmitter
Power Consumption (Max)	21 W	N/A
Recommended Power Supply	29 W	N/A
Heat Dissipation	70 BTU/hr	N/A
Mounting	Wall mount	Pedestal
Net Weight	-	-
Dimension (WxHxD)	37.57 x 20.78 x 10.49 inch / 532 x 954.4 x 266.53 mm	24.57 x 59.69 x 13.58 inch / 624 x 1516.3 x 344.89 mm
Recommended Cutout Dimension (WxH)	N/A	N/A
Operating Temp	0 to 50°C (32° to 122°F)	0 to 50°C (32° to 122°F)
Storage Temp	-20° to 60°C (-4° to 140°F)	-20° to 60°C (-4° to 140°F)
Humidity	0% to 95%	5% to 95% non-condensing
Enclosure	SS 316L	SS 316L
Rating	Meet NEMA 4X/ IP66	Meet NEMA 4X/ IP66
Certification	Available	N/A

ARISTA IPC