# EXPANDING THE BOUNDARIES OF HEALTHCARE

# Iron Bow MedView<sup>™</sup> Installation and User Guide

For use with MedView Model Number: MEDVIEW-W2G-10X-B-xxx

Document # DOC-UG-MEDVIEW-W2G Version 1.1 12/16/2024

IEALTHCARE

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For general inquiries, contact: **Iron Bow Healthcare Solutions 2303 Dulles Station Boulevard, Suite 400 Herndon, VA 20171** Toll: 800.338.8866 Tel: 703.279.3000 <u>www.ironbowhealthcare.com</u>

For support, contact:

Iron Bow Client Service Center Toll: 833.476.6269 (833.IRONBOW) Email: <u>CSC@ironbow.com</u>

#### Safety & Maintenance

For your protection, please read these safety instructions completely before operating the equipment and keep this manual for future reference. The information in this summary is intended for persons who operate the equipment as well as repair or servicing personnel. Carefully observe all warnings, precautions and instructions on the apparatus, or the ones described in the operating instructions and adhere to them. Also, adhere to safety guidelines found in manuals for any peripheral equipment. the equipment.

#### **Care and Handling**

- Water and moisture Do not operate the equipment under or near water, or in areas with high humidity.
- Cleaning Unplug the apparatus from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners, follow cleaning instructions provided
- Ventilation Do not block any of the ventilation openings of the apparatus. Install in accordance with the installation instructions.
- Grounding or Polarization use the power cord provided with this system, do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician.

	United States	Canada
Plug Type	Grounding type 3 Pole Plug	Grounding type 3 Pole Plug
Cord Type	SVT3 x 18 AWG	SVT3 x 18 AWG
Minimum Cord Set Rating	10A/125V	10A/125V
Safety Approval	UL/CSA	CSA

- Plug Acts as Disconnect Device The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.
- Lightning Unplug this apparatus during lightning storms or when unused for long periods of time.
- Network cables CAUTION To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.
- Power-Cord Protection Route the power cord so as to avoid it being walked on or pinched by items placed upon or against it, paying particular attention to the plugs, receptacles, and the point where the cord exits from the apparatus.
- Attachments Only use attachments as recommended by the manufacturer. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Storage If you need to store the system, ensure that it is stored in a controlled environment to avoid damage:
  - $\blacktriangleright$  Non-operating temperature:  $-20^{\circ}C 60^{\circ}C$
  - ➢ Non-operating humidity (non-condensing): 10%−95%
- Repacking Do not throw away the carton and packing materials. They may be required in the event that you need to move the system to an alternate location, or return the system for maintenance.
- "WARNING Do not modify this equipment without authorization of the manufacturer."
- Servicing Do not attempt to service the apparatus yourself as opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty. Refer all servicing to qualified service personnel. If the equipment is damaged, unplug the apparatus from the outlet and refer servicing to qualified personnel:
  - ➤ When the power cord or plug is damaged or frayed
  - > If liquid has been spilled or objects have fallen into the apparatus
  - ➢ If the apparatus has been exposed to rain or moisture
  - > If the apparatus has been subjected to excessive shock by being dropped, or the cabinet has been damaged
  - ➢ If the apparatus fails to operate in accordance with the operating instructions.

#### **Cleaning Instructions**

#### CAUTION

- Due to the close proximity of electrical power and equipment, flammable cleaners should never be used to clean these products!
- The surface materials of the unit are primarily powder-coated aluminum and are durable and easy to maintain, however they can stain and discolor, so test any cleaners in an inconspicuous place before using.
- Do not allow any liquids to enter the unit, drip down the monitor or accumulate on any surface.
- Please refer to the respective Materials Safety Data Sheets (MSDS) for detailed descriptions for each product from its manufacturer.
- Never use steel wool, Scotch-Brite<sup>TM</sup> or other abrasive materials to clean the product.
- Use extreme caution when cleaning the camera, as it is delicate and easily broken.
- Use extreme caution when cleaning a display monitor, as they are easily damaged if too much pressure is applied.

#### **General Procedure**

- 1. Verify the system is unplugged from the AC Power outlet before cleaning.
- 2. Use a soft, clean microfiber cloth or manufacturer supplied disposable cloth for all applications, particularly when cleaning lenses and monitors. Do not spray liquids directly on the surface.
- 3. Utilize appropriate cleaners for the surface being cleaned.
- 4. Allow equipment to fully dry prior to plugging into a power source.
- 5. To facilitate an effective infection control program and ensure proper performance, routinely clean, disinfect, and maintain products in accordance with approved procedures. Specifically, the hospital's Infection Control Administrator should be consulted for cleaning procedures and processes.

Suggested chemical cleaners/disinfectants/solutions for MedView:

- Chassis cleaning
  - Non Abrasive Soap/Detergent: Generally, water and mild non-abrasive soap/detergent or isopropyl alcohol can be used routinely on CLINiC or MedView products to maintain proper cleanliness.
  - o Where infection control is required
    - A 10% or less bleach solution can be used to disinfect. Remove residue using a clean damp (water) cloth.
    - Branded chemical disinfectant products (test specific product on a sample surface before general use)
      - Metrex CaviWipes
      - Clorox Germicidal Wipes
- Camera body (not the lens)
  - Do not use any of the following chemicals or any solutions that contain: chlorine (bleach), acetone, peroxides, ammonia, ethyl alcohol, benzene, toluene, ethyl acid, or methyl chloride.
  - o Branded, ammonia-free LCD cleaning products
    - Zeiss Pre-Moistened Lens Cleaning Wipes
    - CloroxPro Clean Screen Wipes
  - o Up to 50:50 isopropyl alcohol to distilled water mixture for general cleaning, using soft microfiber cloth
  - o Use 70:30 isopropyl alcohol and distilled water mixture for infection control, using soft microfiber cloth
- Camera Lens

   Use
  - Use only branded, ammonia-free cleaning wipes specifically designed for lens cleaning
    - Zeiss Pre-Moistened Lens Cleaning Wipes

#### Notes and Caution

- Use extreme caution when cleaning the camera, do not manually move the camera when it is powered. Damage caused by improper cleaning will void the Iron Bow warranty.
- Do NOT use mineral spirits, acetone, paint thinners, or abrasive cleansers, or any other flammable, harsh or toxic chemicals.
- This document provides general guidelines only. Direction for proper cleaning and infection control is the responsibility of local authority and hospital administration.
- Iron Bow is not responsible for improper cleaning or disinfection in any and all circumstances.

#### **Electrical Safety Information**

Compliance is required with respect to the voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a power source different than those specified herein will likely result in improper operation or damage to the equipment, or pose a fire hazard.

There are no user-serviceable parts inside this equipment. There are hazardous voltages generated by this equipment that constitute a safety hazard. Service should be provided by a qualified service technician only. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment to mains power.

#### **Operating Guidelines**

#### **Mounting Guidelines**

The system is designed for attachment to the top of a display using the optional mounting bracket system, or can be wall or ceiling mounted using the system base attachment points and suitable third party brackets / mounts. Care should be taken to ensure that any supporting device is fir for purposes and is capable of supporting the weight of the system and any attached peripherals/cables.

#### **Connecting Peripheral Equipment**

It is recommended that an AC isolation transformer is used if the system is to be used with any external peripheral that may have direct skin contact. It is also recommended that any external device that may have skin contact are individually certified for such use to avoid risk of injury.

Any AC powered peripheral device must be connected to a separate AC outlet suitable for use with the device as defined by the manufacturer's specification information. In addition, AC power strips or extension cables should not be used with this system.

#### **Ambient Temperature Guidelines**

- ➢ Operating temperature: 5°C −35°C (ambient temperature)
- ➢ Operating humidity: 20%−80% (RH)
- Non-operating temperature:  $-20^{\circ}C 60^{\circ}C$
- ➢ Non-operating humidity (non-condensing): 10%−90%

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## Introduction

The MedView family of products from Iron Bow Healthcare Solutions consists of purpose-built telehealth devices that integrate with existing in-room equipment to enable the delivery of clinical healthcare from a distance.

This MedView product incorporates a hermetically sealed, high reliability fan-less computer with Windows 11 Pro operating system, a high definition pan/tilt camera with a10x optical/10x digital zoom and quad infrared illuminators for nighttime or darkened room operation. The Integrated sound system incorporates a quad beamforming microphone array plus a full spectrum echo canceller, twin channel audio amplifier and dual speakers.

The MedView incorporates a standard VESA mounting hole pattern for installation on common wall mount brackets, or on room displays utilizing optional VESA mounting support brackets

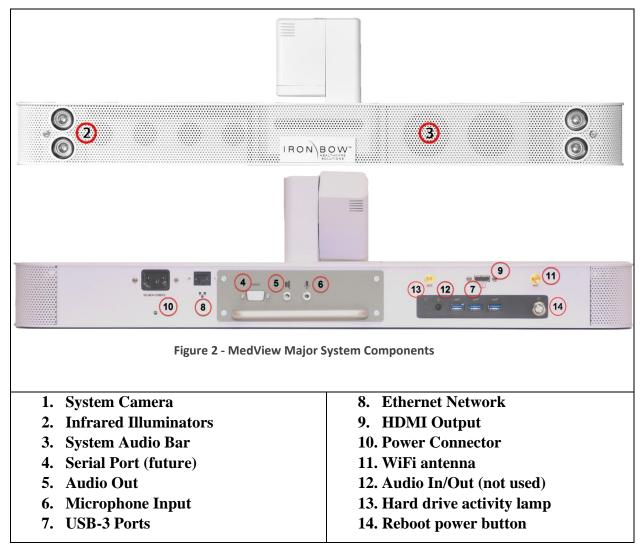


Figure 1 - MedView with Integrated Sound Bar

You can find additional MedView resources, support information and other related telehealth services at <u>www.ironbowhealthcare.com</u>.

# **System Description**

The primary components of the Iron Bow MedView are shown below:



Accessories included with MedView

- Cat 5e cable, 6'
- DisplayPort to HDMI cable, 3', blk
- Power cord, NEMA 5/15P to C13, 6ft, blk
- MedView Quick Start Guide (QR code link to the user guide)

# **System Installation**

The MedView is designed to be mounted on an existing wall arm that is already supporting a monitor using the monitor VESA mounting hole pattern. Iron Bow sells adapter plates to allow for mating the MedView with the VESA mount. Each mount uses the smaller mounts as base components.

The customer is responsible for ensuring that the maximum weight (Medview plus Monitor) can be supported by the existing wall mount and for using the proper length screws for the application. Screws that are too long for a monitor can damage the internal components. Screws that are too short can fail to hold.

Part Number	Description
MEDVIEW-BRKT100-A01	100 x 100 pattern
MEDVIEW-BRKT200-A01	100 x 200 or 200 x 200 pattern
MEDVIEW-BRKT400-A01	300 x 300 or 400 x 400 pattern
MEDVIEW-HDWR-A01	Hardware Kit (screws and spacers for mounting)
ML20B	100 x 100 slip fit mounting adapter (made by VideoSecu)

Mounting kits are listed below.

Some VESA combinations of monitor and Wall Mount are not recommended. See this table for required brackets.

Monitor	Mount	Brackets
100x100	100x100	MEDVIEW-BRKT100-A01
		VideoSecu ML20B bracket recommended <sup>1</sup>
100x100	200x200	n/a <sup>2</sup>
100x200 or	100x100	n/a <sup>2</sup>
200x200		
100x200 or	200x200	MEDVIEW-BRKT200-A01
200x200		
200x200	400x400	MEDVIEW-BRKT400-A01
400x400	200x200	MEDVIEW-BRKT400-A01
		Additional M6 or M8 Nuts required
400x400	400x400	MEDVIEW-BRKT400-A01

<sup>&</sup>lt;sup>1</sup> Adapter allows the assembled MedView and brackets to slide onto a wall mount. Many wall mounts already have this feature. Check your existing wall mount to see if this bracket is desirable.

<sup>&</sup>lt;sup>2</sup> Options are not possible without customization of the brackets or use of an adapter plate

### **Assembly Instructions**

### Attach the MedView to the MEDVIEW-BRKT100-A01 bracket

1. Position the MedView so it is facing down, with the hole pattern on the bottom exposed.

#### DO NOT REST THE UNIT ON THE CAMERA

- a. Attach the MedView to the MEDVIEW-BRKT100-A01 bracket using the (2) M4x8 Phillips flathead screws and the (1) <sup>1</sup>/<sub>4</sub>-20 x 3/8" flathead screw.
- b. The unit can be adjusted forward and back to suit the situation, with 4 sets of holes available for positioning. Use the (2) M4 flathead screws to lock the MedView parallel to the monitor face.

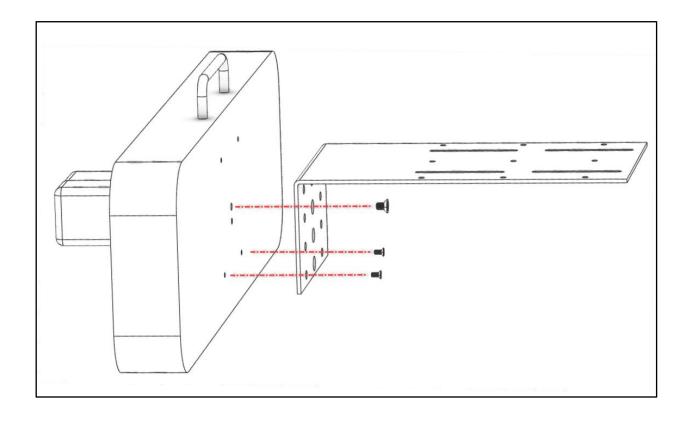


Figure 3 - Assemble MedView to Bracket

### Attach the MedView/MEDVIEW-BRKT100-A01 bracket assembly to the Monitor

- If using a "slide in" adapter bracket (like the ML20B) that allows for easy installation to the wall bracket, you can assemble this with the monitor facing down on a table and the MedView hanging off the side of the table. If the monitor is to be attached directly to the wall mount, then two people should assist by holding the monitor in place while hardware is attached.
- 2. If the rear of the monitor is flat, and nothing prevents the bracket from mounting flat to the surface, the spacers may not be necessary.
- 3. Position the MedView, spacers and bracket such that the VESA hole patterns line up and secure the bracket to the monitor. Use screws of the appropriate length for your monitor and spacers. For example:
  - a. Use (4) M4x25 Phillips pan head screws to secure the bracket to the monitor.
  - b. If <u>no spacers</u> are used, use (4) M4x18 Phillips pan head screws to secure the bracket to the monitor. Using longer screws than is needed may damage the monitor.

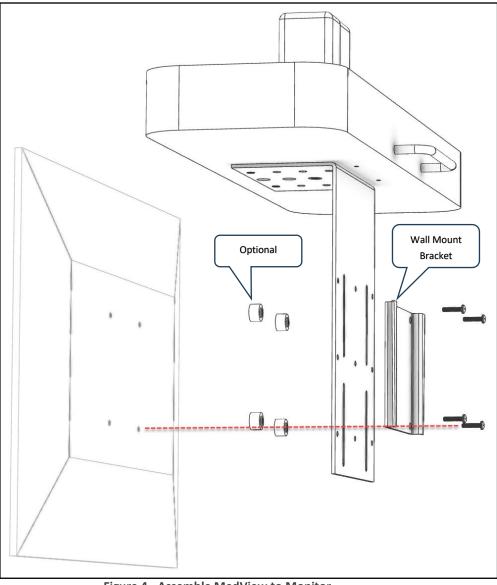
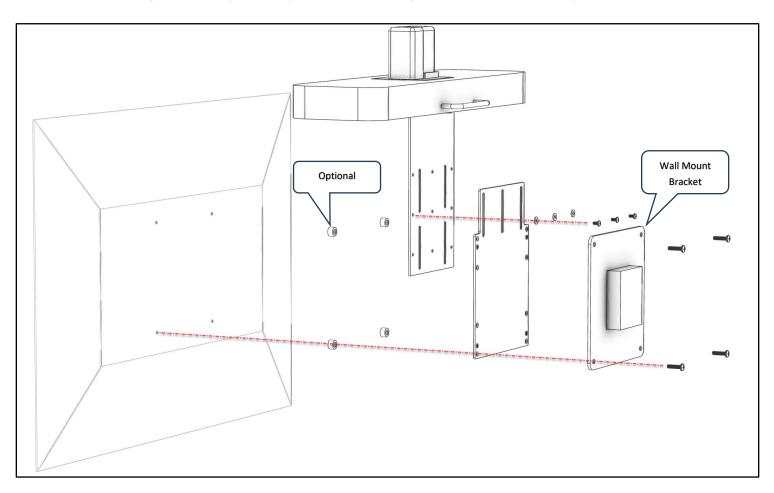


Figure 4 - Assemble MedView to Monitor

### Assemble MEDVIEW-BRKT200-A01 to a Monitor

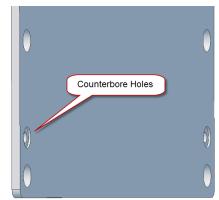
- 1. Follow the previous instructions for <u>attaching the MedView to the MEDVIEW-BRKT100-A01</u> bracket.
- 2. Position the MedView/MEDVIEW-BRKT100-A01 assembly over the monitor. Locate the MEDVIEW-BRKT200 bracket so the slots align with one of the set of (3) 10-32 threaded holes in the BRKT100 bracket while the bracket VESA holes align with the monitor VESA holes.
- 3. Secure the BRKT200 to the BRKT100 plate using the (3) 10-32 x 3/8 phillips pan head screws and (3) #10 washers.
- 4. Secure the bracket assembly to the monitor using M6 or M8 pan head screws of the appropriate length. For example, with spacers use 25mm long screws, or 16mm without spacers.





### Assemble MEDVIEW-BRKT400-A01 to a Monitor

- 1. Follow the previous instructions for attaching the MedView to the MEDVIEW-BRKT100-A01 bracket.
- Place the monitor face down on the edge of a table being sure to protect the front face from scratches or damage. Hold the MedView to over the side of the table while a second person performs the following steps.
- 3. Position the MedView/MEDVIEW-BRKT100-A01 assembly over the monitor.
- Locate the MEDVIEW-BRKT200 bracket so the 200x200 hole pattern is centered on the monitor. The counterbore pockets must be facing away from the monitor.
- 5. Align the slots in the bracket with one of the set of (3) 10-32 threaded holes in the BRKT100 bracket (see item A below).
- Secure the BRKT200 to the BRKT100 plate using the (3) 10-32 x 5/16 phillips pan head screws and (3) #10 washers.
- Attach the (2) MEDVIEW-BRKT400-A01 bracket arms to the BRKT200 bracket using the (4) 10-32 x 5/16 flathead screws (item B below)
- Secure the bracket assembly to the monitor using M6 or M8 pan head screws (item C) depending on your monitor.
   Depending on the wall mount, several people may be necessary to position all the parts for final assembly.





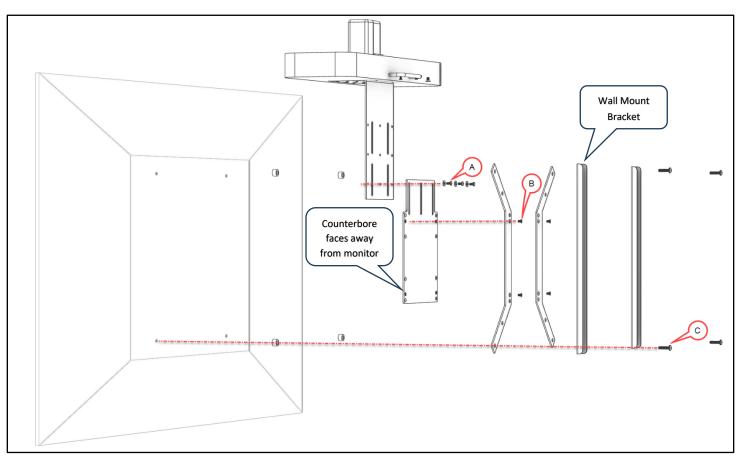


Figure 7 - Add bracket for 400 x 400 mount

Assembly on a security camera mount (without an attached monitor)

While not common, the MedView can be mounted to a ¼-20 threaded video camera mount. A non-rotation pin hole is included in the MedView base plate.

1/4-20 Threaded and Alignment P	d Hole in hole	。 )	
	0	0	

Figure 8 - Assemble MedView on a post mount

### Connections

The base MedView includes an AC power inlet, an Ethernet port for connecting to a wired network, several USB 3 ports for connecting external devices including a keyboard/mouse, which may be required for setting up the MedView system.



#### **Figure 9 - Connection Ports**

- 1. Power Cable (supplied)
- 2. Ethernet Port 1 recommended connection to the local LAN/WAN (6' cable included in the kit)
- 3. Serial Port (future use)
- 4. Speaker Output for adding external powered audio speaker(s). The external speaker(s) will replace the built-in speaker system.
- 5. Microphone in for adding an external microphone for local audio pickup. Will disable two of the four internal microphones.
- 6. Microphone/speaker #2 (not used)
- 7. (3) USB 3.0 ports use for special equipment like a keyboard/mouse for system setup
- 8. HDMI: Install HDMI cable (provided) to monitor or to a signal priority device.
- 9. (2) WiFi Antenna WiFi is not recommended for fixed location installations, but can be configured to work with the MedView if necessary. Thread on supplied WiFi antenna if needed.

# **Getting Started**

### **Powering On and Off**

Connect any required peripherals to the USB ports of the MedView before connecting the MedView to AC power.

### Powering On the MedView

### To power on the MedView:

• Connect the MedView to AC power. This will automatically power on the integrated computer, camera and display of the MedView. A Windows splash screen will be displayed within several seconds.

### Waking Up the MedView

The system goes to sleep after a set period with no activity. This value can be changed from the Windows **Settings** menu

### **Powering Off the MedView**

Powering off the CLINiC is typically unnecessary. Most video endpoints remain connected to the network and in stand-by mode until a call is placed or received. However, you may need to power off the MedView if you need to move the MedView to a different room.

#### To power off the MedView:

• Disconnect the MedView from AC power.

#### **Restarting the MedView**

You can restart the MedView by powering off and powering on the MedView or by pressing the restart button on the rear of the MedView and holding for several seconds.

### **Connecting to the Network**

Before you can make and receive video calls with the MedView, you must connect the unit to the network. There are two ways you can connect to the network: using the integrated Wi-Fi with external antenna, or using the 10/100/1G Ethernet port.

If using WiFi, refer to the Windows System Settings menu to set up connectivity.

## **Control Functions**

There are no control functions on the MedView device itself. An administrator will typically set up the unit to auto answer at a pre-set volume. Users can purchase remote controls for the MedView that allow for in-room call and volume control.

Iron Bow Part Number	Function	Image
ACC-W-REMOTE-A01	Remote control with call management functions, tethered via USB, for ExtendedCare software applications	
ACC-W-VOLCTRL-A01	Remote volume control, tethered via USB, for ExtendedCare software applications	

# Appendix #1: Specifications

The following diagram is not to scale & is provided for dimensional information only.

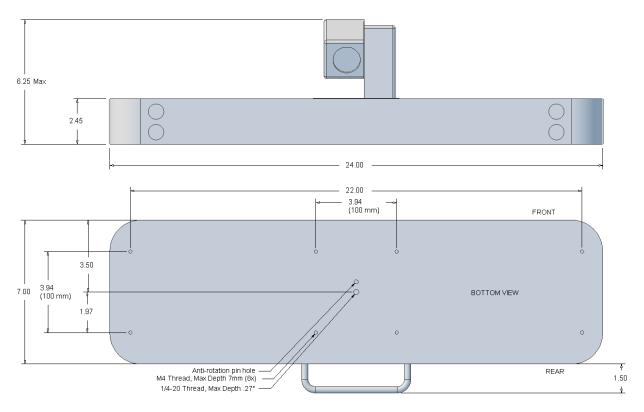


Figure 10 - MedView Dimensions

## **Specifications**

Specifications are subject to change without notice

## Model W10

# MEDVIEW-W2G-10X-B-A01

Feature	Value	
Part Number	MEDVIEW-W2G-10X-B-A01	
Product Description	MedView for Windows applications, for observation	
Product Family	MEDVIEW-W	
Control Method	Keyboard/Mouse via USB (not included)	
Control Method (alt.)	Active-Matrix Touchscreen/pad (optional)	
Control Method (alt.)	Custom tethered remote control (MOQ)	
Camera	Iron Bow PTZ camera, 20x total zoom, IR nighttime operation	
Zoom Range	10x Optical / 10x Digital	
Depth of Field	58 cm - infinity	
Field of View	Horizontal FOV 62.5 – 6.43 degrees	
IR Enabled	Auto/manual Activation (S/W application dependent) at preset lighting level	
Resolution at 30 fps	1920 x 1080	
Illumination	4x IR LED 22mm nightvision lamps; 90°beam angle	
Computer	Fanless, conduction cooled, 12th Gen Intel i5, industrial computer	
Processor	Intel i5-1235U, 12th gen., 1.30 GHz, boost up to 4.4GHz, 10 Core, 12 thread	
Memory	16GB DDR4 PC-3200	
Storage	Kingston 512GB PCIe Gen4 SSD	
<b>Operating System</b>	Windows 11 Pro (pre-loaded)	
Audio Input #1	Full duplex microphone array with echo cancellation	
Audio Input #2	Optional expansion/remote microphone with integrated echo cancellation	
Audio Output	Dual 5 Watt full-range speakers, moisture-resistant membrane	
Video Output #1	HDMI	
USB 3.x inputs	2	
Network (wired)	1 Gigabit Ethernet Port	
Network (Wi-Fi)	Intel Wi-Fi 6 AX201, 802.11ax 2x2 2.4Gbps	
Dim. (w/o Wall Mount)	10.5" x 10.5" x 8.25" (WxHxD); + 0.75" for antenna depth	
Dim. (with Wall Mount)	10.5" x 10.5" x10.0" (WxHxD); adds 1.75" for wall mount depth	
Weight	12.25 lb. (without wall mount); 13.65 lb (with wall mount)	
Electrical (Physical)	1x IEC Type Inlet	

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2303 Dulles Station Boulevard, Suite 400 Herndon, VA 20171

> Toll: 800.338.8866 Tel: 703.279.3000

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