

EVO Cam II – Remote Viewing Options

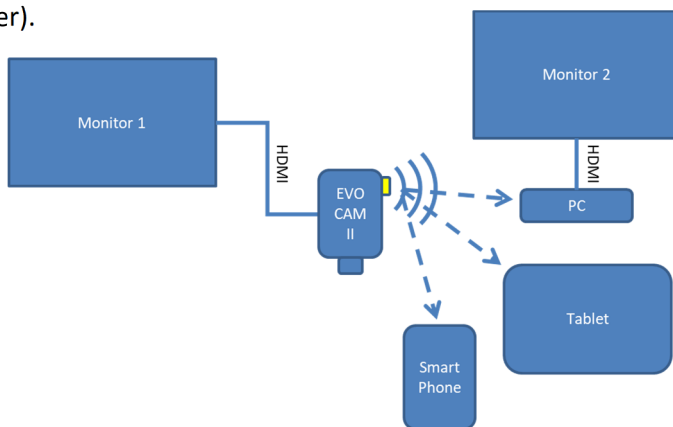
The necessity to maintain social distancing in the workplace is now commonplace. The purpose of this bulletin is to outline options available to EVO CAM II customers for remote monitoring or sharing when staff members are working at various locations.

1) USB stick / flash drive

Images on EVO Cam II can be captured and saved directly to a USB stick. This is one means of recording and sharing work with co-workers but it is not ‘live’ sharing and is limited to image capture only.

2) WiFi dongle

The WiFi dongle (VE part no. EVA350) is an extension of the USB stick in that the images captured can also be read by devices connecting with the dongle. The WiFi dongle is connected to the USB port. It stores captured images and creates a virtual network such that can be accessed by PC, tablets, smartphones up to 32 feet (10 meters) away. Hence co-workers can readily review or download images when required – and do not need to interact with the instrument (or instrument user).



3) Second monitor

Connecting EVO Cam II to a second monitor enables co-workers to observe/assess/discuss work while maintaining a safe distance. A second monitor could be 6 feet (2m) from the system or further away depending on the connection method. A second monitor is ideal for live sharing of data in the workplace but it is not of course a means of recording or transferring data.

Connection methods (for second monitor):

HDMI cable: a cable connection to a second monitor will require connecting an *HDMI-splitter* to the EVO Cam II such that there are two HDMI output ports. A typical HDMI-splitter is shown below (left); it a low cost item and readily available (e.g. from Amazon). It is important to check the adaptor enables two HDMI ports to be used **simultaneously**: splitters that only allow switching between two HDMI ports or monitors (as with the one shown below right) is less likely to be useful for remote monitoring applications.



With the HDMI-splitter in place, the second monitor can be connected using an HDMI cable. These are readily available in various lengths.

HDMI-Wireless extender: These can be used instead of HDMI cables. They connect directly to the HDMI port of the camera and monitor and are suitable for HD video transmission up to ~330 feet or about 65-100 feet if through walls/ceilings. A HDMI-splitter is not required because the transmitting unit has a HDMI input and output port (the EVO Cam II monitor can also be connected via the transmitter).



Pakate HDMI Wireless AV Sender Receiver

We use these in our demo room and routinely use them in our office for a large wall-mounted monitor.

An alternative to an HDMI cable would be an Ethernet or a fiber optic cable. Adaptors and cabling for an **HDMI-Ethernet-HDMI** or **HDMI-fiber optic-HDMI** connection are available and could be used for longer distances (~330 feet and ~2300 feet respectively). However, where distances exceed 330 feet, a direct connection is probably unlikely to be preferred over network sharing .

4) Connection to a PC.

The EVO Cam II is supplied with a USB3 cable (part #5467) as standard for connection to a PC. The PC monitor could replace the HDMI monitor or used simultaneously with it. With regards to remote monitoring, there are several good reasons to connect to a PC:

- The camera display can be shown on a PC monitor using, for example, the Camera app (supplied with Windows 10). The PC monitor could (as described above) be located further away from the EVO Cam II for remote monitoring applications.
- The Camera app enables fast image capture and video recording. As files are saved directly to the PC, they are more readily available for sharing (they can be saved directly to a shared folder) and for sending to co-workers by email for example.
- Live images can be shared with co-workers in the same building or globally, using Skype, Teams, Zoom etc.
- Dimensioning, and annotating images can be done using more advanced (Windows) software than the standard EVO Cam II dimensioning tools, for example, DimensionOne, VifoxEvo and ViPlus - and users do not have to be at the instrument in order to do these post-acquisition tasks.

Summary

Receiving Device	Distance	Live Viewing	1-to-Many	Record Image	Record Video	Requirements	Notes
USB stick	N/A	X	✓	✓	X	USB Stick	Standard. Enables images to be shared, and post-acquisition work (annotating, dimensioning) to be performed away from the instrument.
WiFi to: PC/tablet/mobile	Up to ~32 feet	X	X (local receiver)	✓	X	WiFi dongle (part no. EVA350)	Image capture only. Manual transfer to nearby devices
2 nd Monitor	Up to 50 feet	✓	X	X	X	HDMI Splitter*, HDMI cable*, monitor	*or use the wireless HDMI extender.
USB3 to: PC	6 feet (std), up to 32m	✓	✓ (networked PC)	✓	✓	PC. For >6 feet an Active USB Extender	Image capture is also much faster.

If you have any questions please contact your Vision Engineering representative.