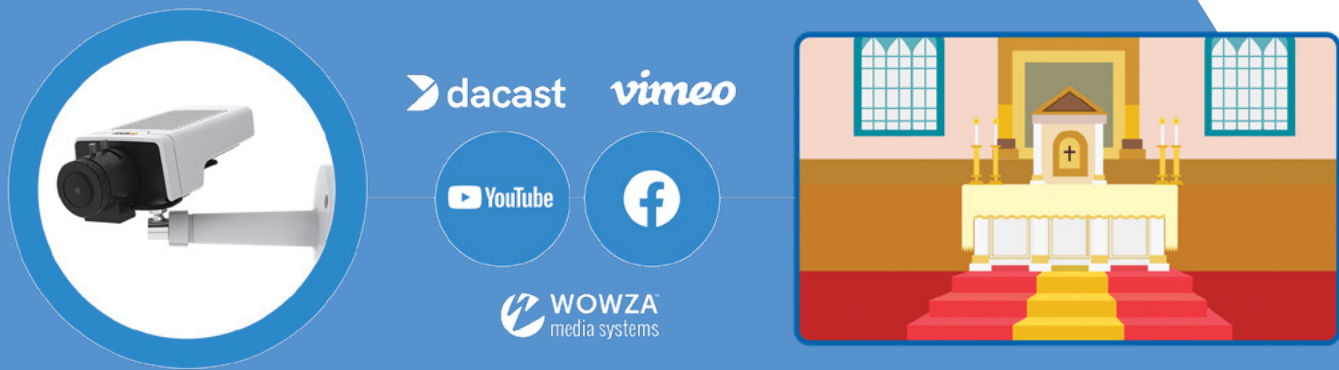


USE CASE - guide for partners

● LIVE video streaming & recording: Places of worship



Internet live streaming solutions are in high demand in many fields, and they are being increasingly sought out for use in religious sanctuaries. **Churches and other places of worship** can take advantage of **live streaming** to bring people broadcasts of services, mass, baptisms, and other events, and they can also make recordings of such events available online.



There's a wide range of possibilities for setting up a live broadcast, but solutions based on **CamStreamer applications** are unique in their simplicity. All one needs for live streaming is an **AXIS network camera with the CamStreamer App and an internet connection**. No other hardware required! Moreover, users don't need to be IT experts to make regular use of their live broadcasts.

Key characteristics

- ✓ **Easy installation**
- ✓ **No computer required** for operation
(everything is handled by the IP camera connected to the internet)
- ✓ **One-time investment** with no monthly fees
(you pay only for the hardware and installation; operation costs nothing)
- ✓ **Easy controls**
(starting a live broadcast requires no IT skills)



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● LIVE video streaming & recording: Places of worship

1. Camera

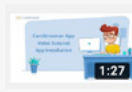

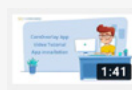

- The foundation is a camera from Axis Communications. In addition to outstanding video, AXIS cameras have a lot of computing power, making it possible to run CamStreamer apps on board. The **CamStreamer App** (\$299) allows for **live streaming from the camera** directly to platforms like YouTube, Facebook, and many others. Another highly practical tool is the **CamOverlay App** (\$299 or \$499 in a bundle with CamStreamer App) which **adds dynamic graphics directly to the video**, such as an info ticker, alternating graphics, and more.
- For use in places of worship, we recommend choosing from three models of network camera that we've successfully tested for this type of installation: [AXIS M1135](#), [AXIS P1375](#), [AXIS V5915](#).

	  AXIS M1135	  AXIS P1375	  AXIS V5925
Image	2 MP / HDTV 1080p at 25/30 fps	2 MP / HDTV 1080p at 50/60 fps	2 MP / HDTV 1080p at 50/60 fps
Camera type	Static	Static	Pan / Tilt / Zoom
Lens	Manual field of view adjustment (horizontal 90°-33°, vertical 49°-19°)	Manual field of view adjustment (horizontal 124°-42°, vertical 65°-24°) Remote back focus, autorotation	Remote 30x zoom control (field of view horizontal 63.7°-2.3° and vertical 34.5°-1.2°)
Image properties	Forensic WDR Lightfinder	Electronic image stabilization Forensic WDR Lightfinder 2.0	Electronic image stabilization Dynamic WDR 120dB Pan: ±170°, 0.2-100°/s Tilt: -20°-90°, 0.2-90°/s
Audio inputs	3.5 mm external microphone input or line input (mixing table), built-in microphone	3.5 mm external microphone input, line input (mixing table), digital input with ring power, built-in microphone	XLR balanced mono input (left/right with mic phantom power 48 V), balanced external microphone (mono), balanced line level (mono, mixing table), 3.5 mm unbalanced stereo input (mixing table), unbalanced external microphone (stereo), bandwidth 20 Hz - 20 kHz, CD quality audio ARTPEC-7 processor
I/O ports	1 x input (e.g. for connecting start/stop external button) 1 x output (e.g. for connecting indication LED)	2 x input (e.g. for connecting start/stop external button and external button to enable/change overlay graphics) 2 x output (e.g. for connecting indication LED and other signalization)	2 x input/output e.g. for connecting external start/stop button and external button to enable or change overlay graphics, connecting indication LED and other signalization
Summary	An affordable camera with high image quality. Equipped with basic integrated microphone, but also offers external microphone and mixing table options.	High-performance camera with advanced features for poor low light conditions and with great remote back focus functionality. Equipped with basic integrated microphone, but also offers external microphone and mixing table options.	High-performance camera with pan, tilt, and up to 30x zoom with outstanding image quality and view angle control during streaming. The camera features unparalleled CD-quality audio. Audio sources via XLR connectors make this camera the absolute leader in its field.
MSRP	\$419	\$649	\$1,999



● LIVE video streaming & recording: Places of worship

Tip: Installation of the CamStreamer apps is very easy. See for yourself in these video tutorials:

 <p>CamStreamer App Video Tutorial - App Installation CamStreamer 1:27</p>	
 <p>CamOverlay App Video Tutorial - App Installation CamStreamer 1:41</p>	



2. Audio

Quality audio transmission is very important for places of worship. Below, you'll find a summary of the individual options:

1. Use of an internal microphone in camera M1135 or P1375 – we've thoroughly tested these cameras. Despite having basic integrated microphones, they offer good audio with minimal noise and are wholly sufficient for the most affordable solution.

2. Use of an external microphone is possible either via a classic analog microphone input (cameras M1135 and V5915) or using a digital microphone (camera P1375). The digital microphone features high-quality audio. We recommend using the [AXIS T8355 Digital Microphone](#) (\$129). Moreover, V5915 has an incredible range of audio options, incl. symmetric balanced XLR mic inputs with phantom power.



3. Use of an external audio source – many places of worship are fitted out with their sound system. We can connect that technology to our solution to broadcast online with audio:

- all cameras have a line-in (3.5 mm jack); model V5915 also has dual XLR ports for connecting microphones, including phantom power;
- we often encounter situations where a sound system mixing table is too far from the camera for online broadcasting. To eliminate complicated cabling, broadcasts can make use of **wireless** audio; The [RØDE Wireless Go](#) (\$199) serves this purpose very well and can transmit audio in outstanding quality up to 70 meters. Another advantage is that the device also has a microphone, thus it can be used as a wireless lapel mic for the speaker. The device has a battery with up to 7 hours of life and USB charging (on transmitter and receiver as well).



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● LIVE video streaming & recording: Places of worship

4. Use of network audio with the **AXIS C8033 Network Audio Bridge** module (\$199). The module is connected to the mixing table, where it picks up analog audio. It then encodes the audio in high quality with the AAC codec, and the CamStreamer App lets the camera take it from the module on the network as an RTSP stream, which mixes with the video from the camera.



3. Streaming platform

There are numerous options for where to transmit a live broadcast. You can choose from free platforms (YouTube, Facebook), paid platforms ([Dacast](#), [Wowza](#), [Vimeo](#)), and even platforms intended specifically for places of worship (e.g. [StreamingChurch.tv](#)).



- **24/7** online streaming
- broadcasting is **free of charge**, and there is the practical option to **archive broadcasts** and **divide them into playlists**;
- **viewers don't need to register** to watch videos, and the platform works in any web browser as well as on tablets/mobile telephones;
- optional **private** broadcasting only for users with a link to the video (which they receive by email, for example);
- video can be **embedded directly into websites** (for accounts with enabled embedding);
- setting up a broadcast **takes only a few minutes** and can be automated, for instance **by pressing an external button** (described below);
- optional **regular events** – you can, for instance, broadcast daily at a set time, or choose any type of schedule;
- the administrator can **download videos** onto a computer as video files. If necessary, the video can be **edited** directly within YouTube Studio;
- **Up to 4K/UHD video resolution.**
- **Check out this video tutorial:**



- maximum **4 hours streaming**
- **many places of worship have already begun using this social network** to communicate with their followings;
- broadcasting is **free of charge**, and there is the practical option to **archive broadcasts** and **divide them into playlists**;
- **viewers don't need to register** to watch videos, and the platform works in any web browser as well as on tablets/mobile telephones;
- optional **private** broadcasting only for invited users – works the same as sharing posts on Facebook;
- video can be **embedded directly into websites** (for accounts with enabled embedding);
- setting up a broadcast **takes only a few minutes** and can be automated, for instance by pushing an external button (described below);
- optional **regular events** – you can, for instance, broadcast daily at a set time, or chose any type of schedule;
- the administrator can **download videos** onto a computer as video files;
- **Maximum video resolution is 720p.**
- **Check out this video tutorial:**



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LIVE video streaming & recording: Places of worship

- Churches also use the Streamingchurch.tv platform, which in addition to streaming supports other services for churches. More at www.streamingchurch.tv.
- The CamStreamer App can also stream on many other platforms (Dacast, Wowza, Vimeo, ...) which provide a number of additional interesting features compare to free platforms. You'll find more information on CamStreamer website.

4. Automation

A huge advantage of this solution is automation.

1. Automatic broadcasting

The CamStreamer App offers the option of planning regular broadcasts at a set time, including recurrent scheduling. Before a broadcast on YouTube or Facebook, a thumbnail of the video is displayed with a countdown timer.

2. Video archive

Recordings can be automatically archived, allowing viewers to watch videos after the live broadcast has ended.

3. Manual start using an external button

- We recommend using cameras with an I/O port for connecting a physical external button. Take a look at our tutorial how to create your own external rocker switch button connected to your camera [here](#).
- In the CamStreamer App, the button can be assigned to a specific action, such as starting a stream.
- Starting and stopping a live stream can thus be done very easily with the push of a single button, a function that is very popular with a places of worship.



Tip: How to connect an external camera and start broadcasting with the push of a single button? Find out in this [use-case description of the solution](#).



4. Indication LED

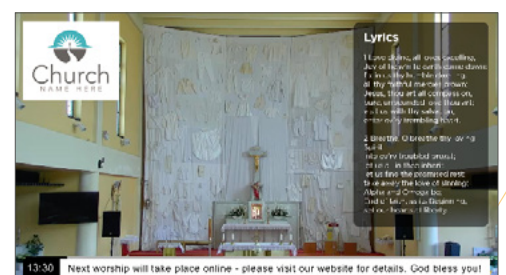
- An LED can easily be connected directly to the camera to indicate live broadcasting.
- The LED diode blinks during preparation and lights during broadcasting. If the same LED is used for more streams the LED lights after the last stream is started. LED on output has the same behavior.
- It can be set in Advanced options of stream settings in the CamStreamer App.
- The [AXIS I/O Indication LED](#) (\$18) can be used, or any 12V LED can be connected via the I/O port .



5. Dynamic overlay graphics

Optional [CamOverlay App](#) (\$299 or \$499 in a bundle with CamStreamer App) can add dynamic graphics directly to the video, such as an info ticker, alternating graphics, and more.

More about this app [here](#).



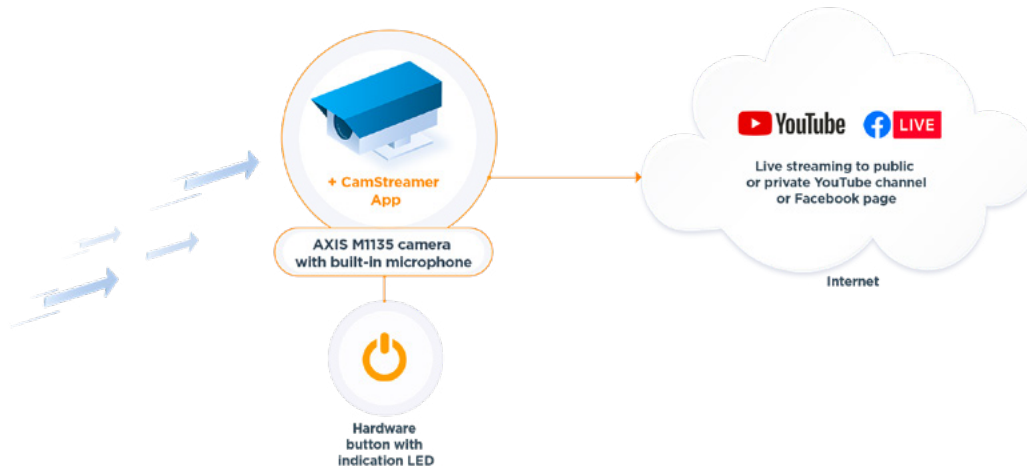
USE CASE - guide for partners



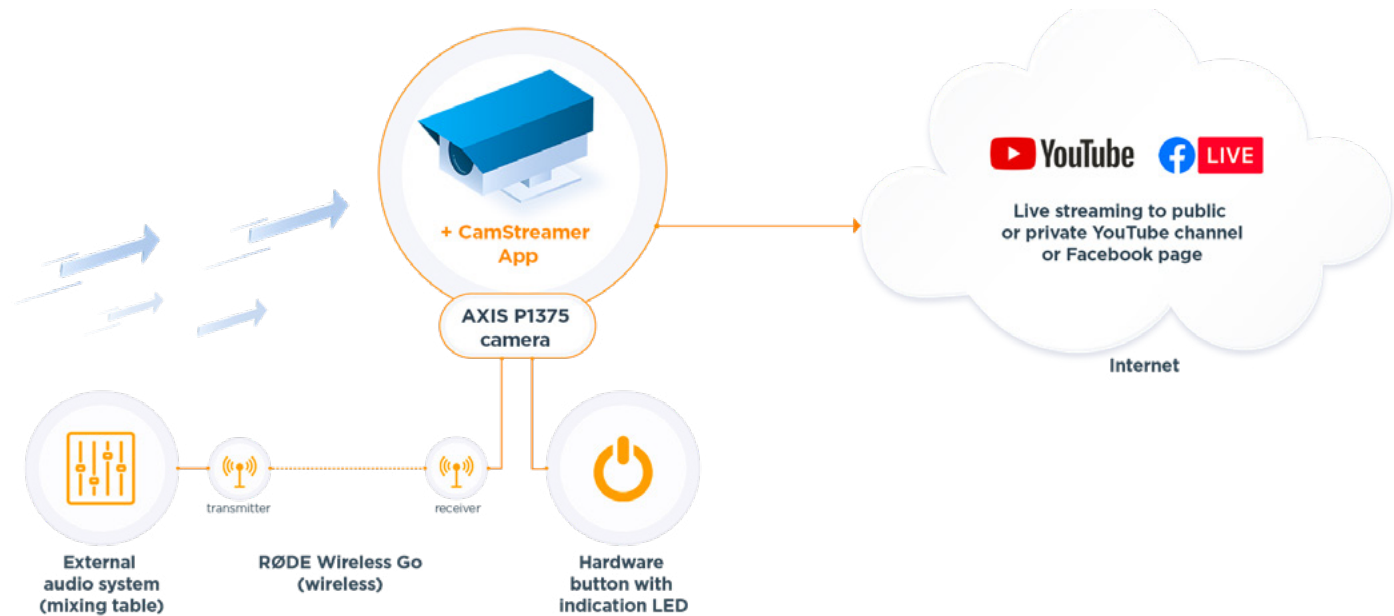
● LIVE video streaming & recording: Places of worship

Typical installations

AXIS M1135 with button and indication LED



AXIS P1375 with wireless audio from mixing table and button and indication LED





 LIVE video streaming & recording: Places of worship

References

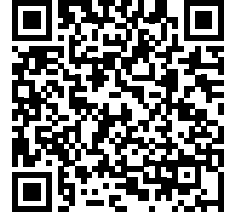
[Church of Saints Cyril and Methodius](#)

Prague, Czech Republic



[Church of St. Bartholomew](#)

Hviezadne, Slovakia



[Shrine of the Sacred Heart Jesuit](#)

Chicago, USA



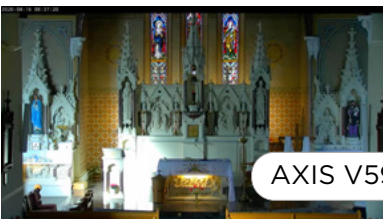
[Sanctuary of the Divine Mercy](#)

Vilnius, Lithuania



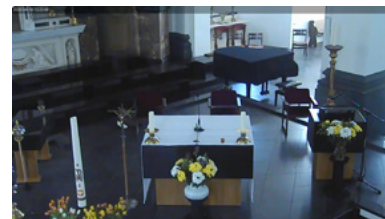
[St Brigids RC Parish Church](#)

Dunleer, Ireland



[H. Antonius Abt church](#)

Wijchen, Netherlands



[Altar in Saint Adalbert's church](#)

Radzionków, Poland



Check out other churches at [CamStreamer Live Gallery.](#)



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- LIVE video streaming & recording: Places of worship



How to get started?

Contact your local AXIS/CamStreamer reseller:

or find a contact at <https://www.axis.com/where-to-buy>.

You can purchase the smart CamStreamer applications through our partners - www.camstreamer.com/partners or directly at www.camstreamer.com.

Want to know more?

Contact us at
sales@camstreamer.com

