

Case study

BC Opava – Broadcasting from Only One Camera Using CamStreamer Apps and Dewarping Function



Mission

Basketball has a long tradition in Opava. It has been played here for almost 80 years, and in the last many years, the Opava club is among the top clubs in the Czech Republic and plays in the first basketball league.

The modern multi-purpose hall, where the club is located, corresponds to this. It was built 20 years ago and is a modern sports facility that meets all the requirements for the operation of this great sport. Hand in hand with modern times, the operator of this hall provides online broadcasts of selected matches.

Until now, only the matches of the top competition were broadcast with the help of a large crew and TV equipment. However, this has changed with the discovery of a smart sports broadcasting solution from CamStreamer.

How would the stadium broadcast all matches with the most negligible additional costs?

This solution is highly automated and does not need any TV crew, expensive equipment, or complicated setup. Thus, it is possible to provide professional-quality online broadcasts of even minor competition matches or training sessions, bringing the sport closer to the fans.

List of Supplies

Video quality:	4K/Full HD
Audio:	Internal audio
Camera model:	AXIS P3268-LV
Technology:	CamStreamer Cloud
ACAP application:	CamStreamer App
	CamOverlay App
	CamSwitcher App
Streaming platform:	YouTube.com, TVCOM
Location:	Czech Republic

Solution

A single fixed-mounted Axis camera with installed CamStreamer apps provides everything. **The AXIS P3268-LV is the latest 4K camera from Swedish manufacturer Axis Communications, making it possible to turn a single shot into a fully automated online sports broadcast.** Thanks to the high resolution, several „view areas“ in Full HD are created from a single image and then streamed. Thanks to the camera’s high power, the CamStreamer software applications take care of the rest, which is processed directly in the

Case study

BC Opava – Broadcasting from Only One Camera Using CamStreamer Apps and Dewarping Function

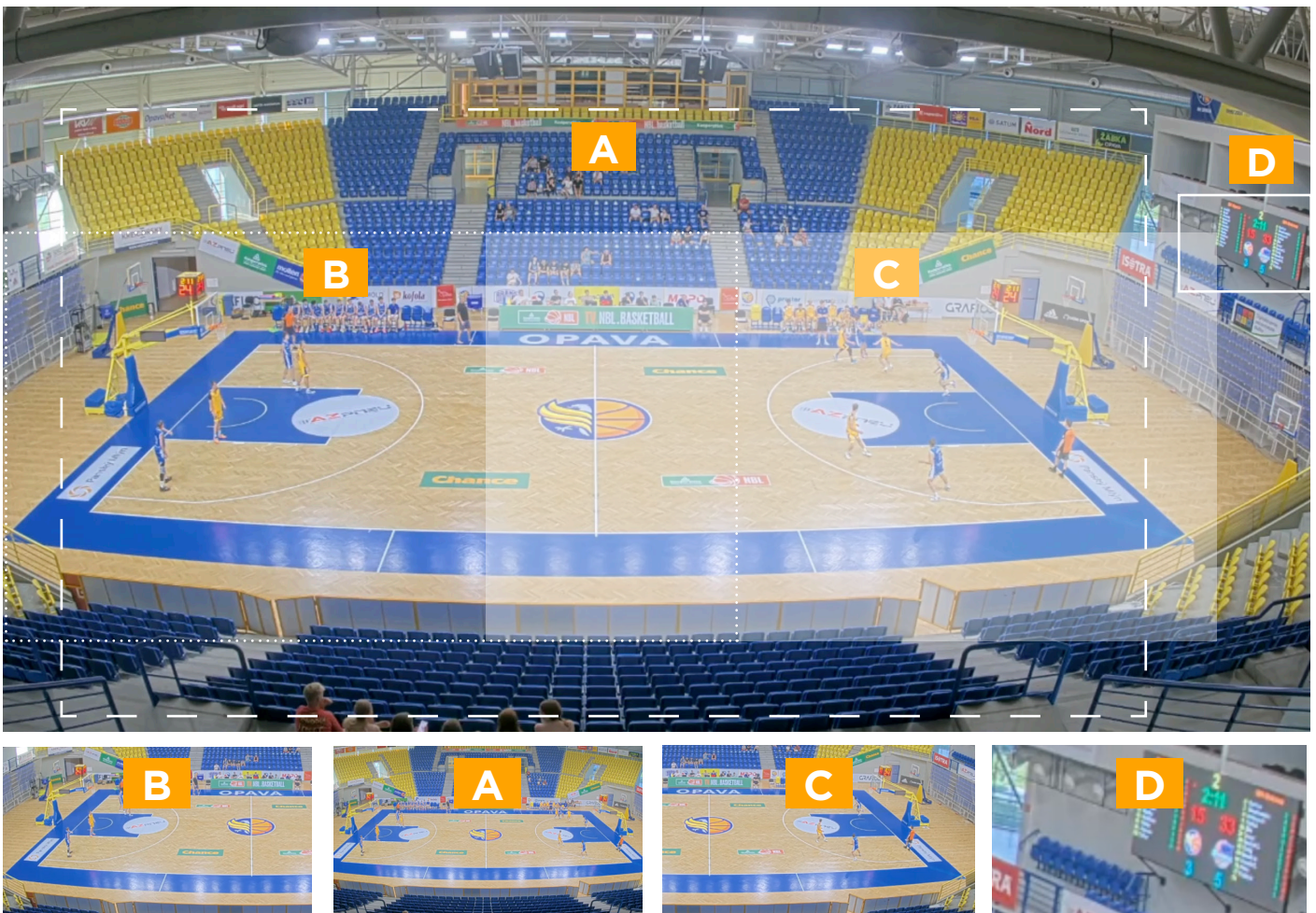
camera. The **CamStreamer App** ensures streaming directly to the club's YouTube channel by manually switching it on or automatically at pre-set times. The **CamOverlay App** is an app that implements beautiful graphics into the image with information about what clubs are currently playing. It also allows for a unique feature, „**Dewarping**“, the insertion and alignment of a shot of the physical scoreboard, which is also visible in the main camera view. This scoreboard is then digitally straightened and inserted directly as a picture-in-picture. And finally, the **CamSwitcher App**, which, thanks to the Sport Tracker function, can automatically switch between camera „shots“ according to the movement of the players on the

pitch. There is no additional computer; only a stable internet connection is needed.

The camera is also connected to the CamStreamer Cloud platform, which **allows it to be remotely managed and set up, including all CamStreamer applications running on the camera**. The platform also has several watchdog features that monitor whether everything works as it should and send alerts if there is any problem. There is also the option of managing recording in the platform to a local SD card on the camera and (or) to a remote cloud. As the icing on the cake, this camera also works as a security camera at night. It can send an alert if there is movement in selected areas outside of stadium opening hours.

How does it work?

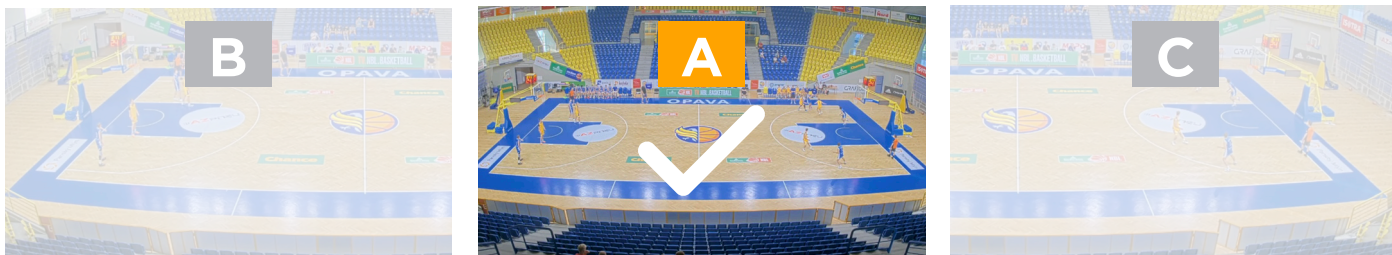
1. The Axis 4K camera covers the entire field, including the scoreboard, and this is what the individual shots look like



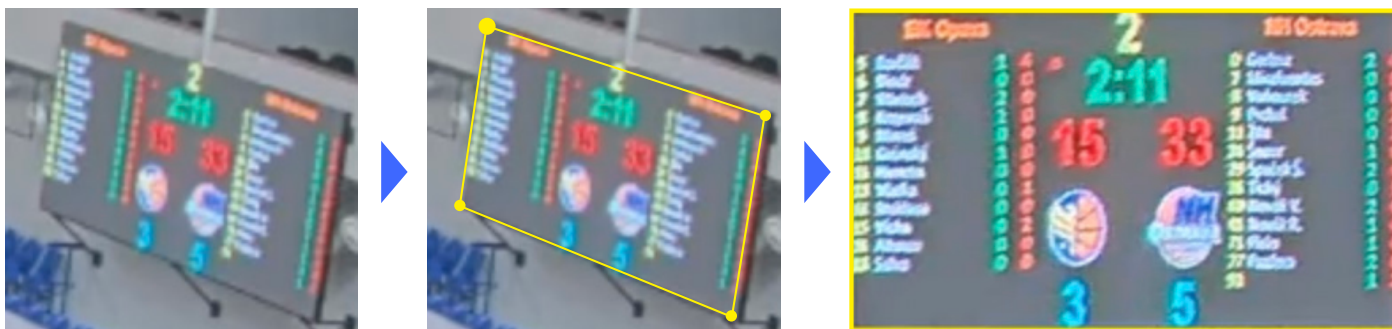
Case study

BC Opava – Broadcasting from Only One Camera Using CamStreamer Apps and Dewarping Function

2. CamSwitcher App switches the broadcast shot according to the current movement on the pitch



3. The CamOverlay App straightens the scorecard and displays it with an infographic



4. CamStreamer App streams the edited output as an online stream from the camera directly to YouTube



Case study

BC Opava – Broadcasting from Only One Camera Using CamStreamer Apps and Dewarping Function

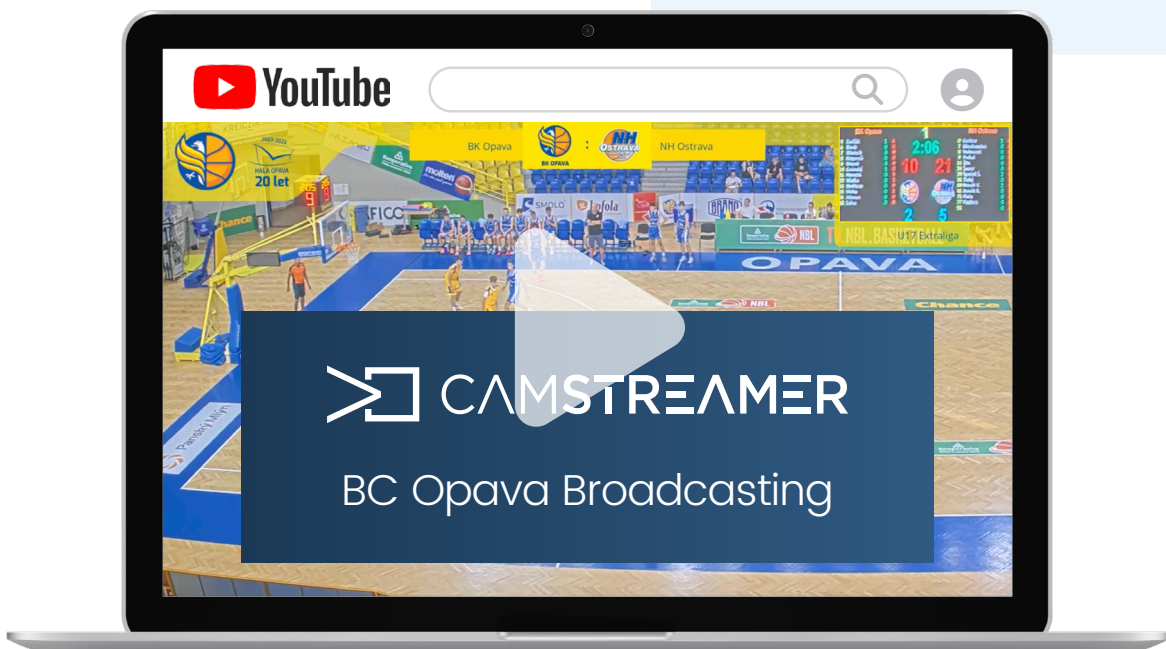
Result

The result is a fully automated feed that displays scores from the scoreboard, attractive graphics, and dynamic shots switching based on the play on the field. All the operator has to do to start the stream is set up and run the transmission with a few clicks. And he can do this, for example, via the mobile app, which can conveniently control all these functions.

“It’s an ideal solution for us because it can bring the game and, for example, training sessions closer to our fans and players’ families. In addition, the records automatically created in the cloud platform also serve for coaches to analyze the game and the players’ training afterward. The acquisition costs of this solution are orders of magnitude lower than if the livestreaming is handled in the standard way of a TV crew and production. We can only recommend this solution.”

Dominik Janoš, BC Opava.

<https://camstreamer.com/resources/>



[Watch a video of how a single camera provides sports coverage from a basketball stadium.](#)

CamStreamer Sport Solution