Specta 4K

Specta 4K is a small, easy to use video encoder and compressor to help transmit video over any network regardless of topology or reliability. Specta compresses your existing video to be transmitted over fixed, cellular, or satellite networks.

Overview

Designed to be an easy entry into low bitrate, 4K transmission, Specta 4K is designed to be quickly configurable and deployable in a large number of scenarios whilst supporting a wide range of video inputs.

Take it with you for a drone deployment and transmit reliable high-quality video over cellular. Deploy it into a remote station with up to 4 camera feeds, allowing more situational awareness than standard encoders with limited camera inputs. Specta 4K supports just about any IP security camera on the market, including ONVIF PTZ cameras with full remote control into your VMS.

Support for USB devices is also available, including small webcam-like devices or HDMI/SDI adapters to open up compatibility with more cameras. Setup is as simple as assigning server and IP settings in the USB configurator, powering the unit on and remote control via the server. Once connected, the server redistributes your compressed video feeds as RTSP/ONVIF S in H.264/H.265 format while keeping the bitrate low.

Green Video Transmission & Distribution

As Specta aims to be as low power as possible, we can help you reduce hardware and power requirements from the edge and back to the server room.

Specta 4K consumes 8W nominal when transmitting 4 1080p streams. The Video Server included with Specta can redistribute over 1000 streams on a conventional 4 core system while using minimal computer resources. Recordings are also compressed, allowing you to store huge amounts of video at much lower capacity.
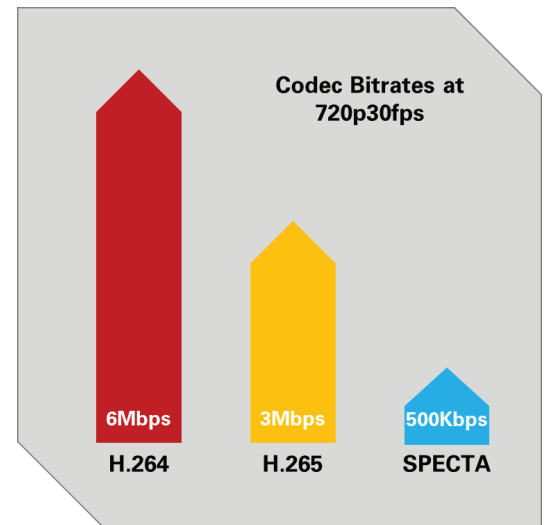
Specifications

Video Input	ONVIF/RTSP IP Cameras, USB/UVC Devices
Networks	2x RJ45, 2x USB (RNDIS, WiFi, Ethernet), 1x LTE Modem
Input Formats	YUYV, NV12, I420, MJPEG, H.264, H.265
Output Formats	RTSP/ONVIF S plus metadata, H.264, H.265
Compression	4Kbps to 2Mbps (compressed)
Dimensions	110 x 80 x 42 mm
Power	12VDC at 2A recommended, 8W Nominal (12W peak)

Specta 4K

Optimized for High Quality, Low Bitrate

- Compress high resolution video down by more than 90% while keeping the quality high

- Fast and efficient compared to other video standards, <20ms encode latency

- Supports 4K resolution, multiple 1080p cameras

- Compress ONVIF, RTSP Streams; almost all USB cameras supported

- Simultaneous transmit, record and control of multiple cameras from a single device
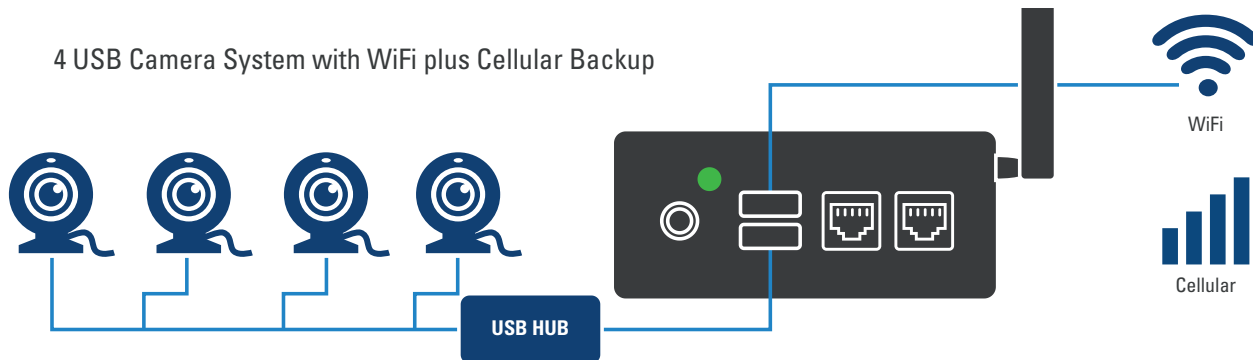
Codec Bitrates at 720p30fps

6Mbps	3Mbps	500Kbps
H.264	H.265	SPECTA

Specta 4K Use Case Diagrams

Multi-Camera System with Cellular

IP PTZ   IP Fixed   USB

Cellular

4 USB Camera System with WiFi plus Cellular Backup

USB HUB

WiFi

Cellular

IP Camera System with Fixed Line and Cellular

Network Switch

Router

Cellular