



Xnap™ Box

Face / Object Detection Processor

Make your video surveillance camera smart enough to see human face/body & vehicle

Xnap™ Box processes video from any standard 1080p RTSP H.264 / HTTP MJPEG IP camera / MJPEG AVI File

Your surveillance camera is now a smart camera – and more. Without significant wiring changes with your current surveillance camera and NVR system, Xnap™ Box™ reads second video stream or USB file source (FAT32/exFAT) of your cameras, decode it and detect all faces/object visible in video frames at 20fps (or more), and crop all faces/objects out of background, and send face stream in HTTP protocol to enable real-time identification or post-event analysis and / or identification.

Xnap™ Box is designed for seamless integration with third-party face recognition system to form large-scale surveillance system with automatic face and/or object recognition. Product comes with well-documented sample codes and email support service to enable software developer to integrate the output of Xnap™ Box with their existing surveillance system.

Features

- Each Xnap™ Box processes one RTSP H.264 / MJPEG video stream over IP network, or MJPEG AVI USB File sources on FAT32 thumb drive
- Support up to 1920x1080 resolution with precise resolution auto-detection
- Near real-time face detection algorithm using deep learning technology
- Export MJPEG face/object streams, alongside with meta-data, through HTTP protocol by default
- Optional : face/object image output to USB thumb drive
- Detect multiple faces and objects with size range from 72 to 1200 pixels in 1080p (2 mega pixel) frame
- 20° yaw/pitch/roll pose variation
- Face detection missing rate* < 0.01%
- Compact-size enclosure
- Built-in face blurriness detection to reduce undesirable blurry face images
- Built-in object colour detection to provide dominant colour image of pedestrian/vehicle (meta-data to be sent via HTTP)
- NTP support for time synchronization to ensure precise (up to micro-second level) timestamp with all captured images
- Filename of face image shall be derived from camera system time (via ONVIF) & timestamp information of the concerned frame of the input RTSP source (only in local storage mode)
- Simple web-based guided operation to export face images to USB thumb drive
- Built-in web-based utilities to fix/format USB thumb drive into FAT32 / EXT4 format
- 802.11n Soft-AP mode support to allow web-based administration from any PC /



H.264
MPEG-4/AVC



RTSP



- Powered by 5V 2.5A Certified MicroUSB cable
- Bonjour Support for the latest web browsers

smartphone / tablet with a standard web browser.

- Administration web with password authentication (next version)
- Built-in ONVIF discovery tool (upcoming next version)

Included in the Box:

- Xnap™ Box
- Certified USB power supply (5V 2.5A)
- Certified MicroUSB cable with Power Switch
- Installation and Administrator Guide
- Integrator Kit document and sample codes

Requires:

- 100MB Ethernet connection
- Standard 1080p (2MP) surveillance camera with H.264 RTSP / MJPEG streaming
- MJPEG AVI File on FAT32/exFAT formatted thumb drive
- Multiple stream output if simultaneous face detection and NVR recording is necessary

Welcome to XnapBOX from Xnap!

[Basic Setup](#) • [System Status](#) • [XnapBOX Service](#)
[System Update](#) • [Tuning](#) • [Restart](#)



Thank you for using XnapBOX.

Specification

Model Name	Xnap™ Box
SKU	SB-R3-F10-G01 (Dark Gray)
Description	Face/Object Detection Processor for video surveillance
Model number	ASL-02
Standards	H.264 Standard & High Profile, RTSP, MJPEG, AVI, FAT32, 100M Ethernet, HTTP, FTP, Soft AP, 802.11n, Bonjour
Power Requirement	5V DC 2.5Amp
Dimensions	10.3 (L) X 6.7 (W) X 4.1 cm (H)
Operating Temperature	0°C – 70°C with ventilation
Device Weight	145g
Warranty	1-year limited warranty
Certification	CE

2 system operation modes:

- USB : Trigger frame grabbing and Face Detection via USB Hot Plug.
- Always On: Fully automatic frame grabbing and Face Detection upon power-up. (required predefined RTSP / MJPEG source name)

* Face Detection Missing Rate: the chance that not even one single facial image is being captured by Xnap™ Box when a pedestrian passed through the surveillance viewpoint. This is an in-house benchmark data.

** Specification and software features are subject to change without prior notice.

*** Like any biometrics, face detection intrinsically cannot provide 100% detection accuracy.

§ Quality of cropped face depends very much on the quality of sensor and optical lens, aperture, exposure and gain control, frame rate, bandwidth, QoS settings of camera. Please consult your surveillance specialist on how to attain desired quality of images.

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