AfterBurner-IP 4 channel IP video recorder

4 Channel Evidential Video Recorder

AfterBurner-IP is a 4 channel IP video recorder which has been specifically designed for video evidence gathering by governmental security organisations. It adds an IP capability to Ovation Systems' AfterBurner and FlashBack ranges of evidential video recorders for law enforcement.

Full resolution local recording

AfterBurner-IP records up to 4 IP cameras at full HD (1080p) resolution to a removable and hot-swappable SATA drive of up to 2TB. For ease of deployment, the product includes user friendly features such as power-over-Ethernet (PoE) internal motion detection, multiple timers and a flexible trigger system. Front panel buttons and LCD allow for user control and configuration of the major functions which is complimented by an easy to use full web-page interface available via Ethernet or WiFi. Recordings are made in industry standard MP4 format which are compatible with almost any video player or editor.

Simultaneous live steaming to VMS at lower bit rates:

Whilst recording, AfterBurner-IP can re-stream the four cameras to video with configurable frame-rate and resolution. This feature allows for full quality local recording with simultaneous live re-streaming at lower bit-rates to save bandwidth. Furthermore, AfterBurner-IP is Onvif-s compatible so interfacing to VMS, such as Milestone, is straight forward and PTZ cameras are supported as standard.

Evidential integrity and security:

Evidential integrity is assured with onscreen date and time, SHA-256 hash coding of files and optional AES encryption. Remote connections can be secured using the internal IP-Sec or Open VPN*s. Ovation Systems also provide free server software to make the connection to remote devices from an unknown IP address quick and secure without the need of a VPN.
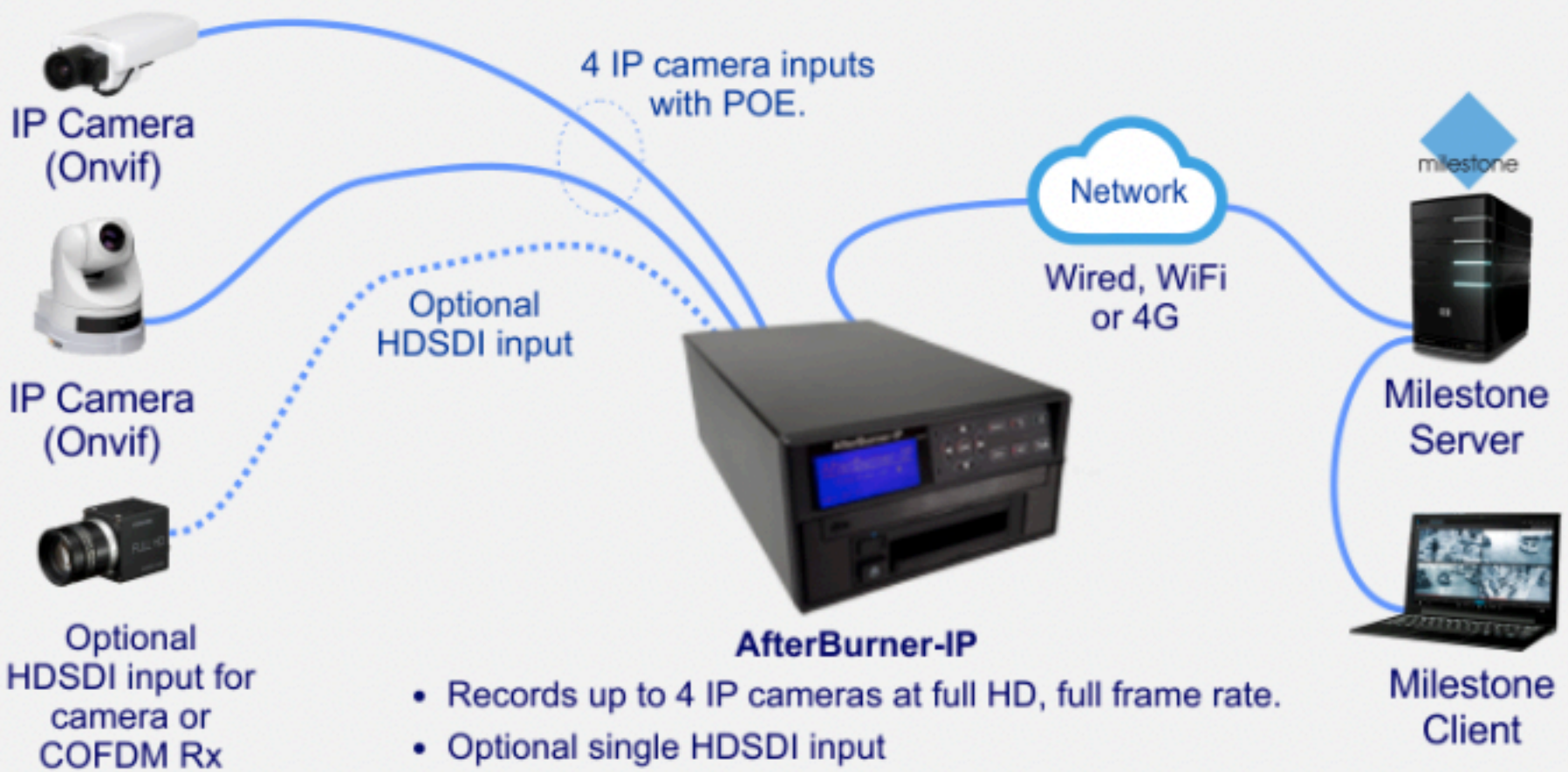
* Available via free future firmware upgrade

AfterBurner-IP

- Records up to 4 IP cameras at full HD, full frame rate.
- Optional single HDSDI input
- Removable SATA drive of up to 2TB, hot swapping supported.
- Onward live stream of each camera to Milestone with programmable bit-rate, frame-rate and resolution.
- Secure network connection via internal IP-Sec VPN.
- Supports Ovation Server for secure remote connection to deployments with dynamic (unknown) IP addresses.

System Diagram

🏠 Home   📂 Recordings   📂 IntDsk Timeline   ⚡ Triggers   ⊙ Timers   ▦ AV Setup   🖥 Stream Setup   ⛓ Network
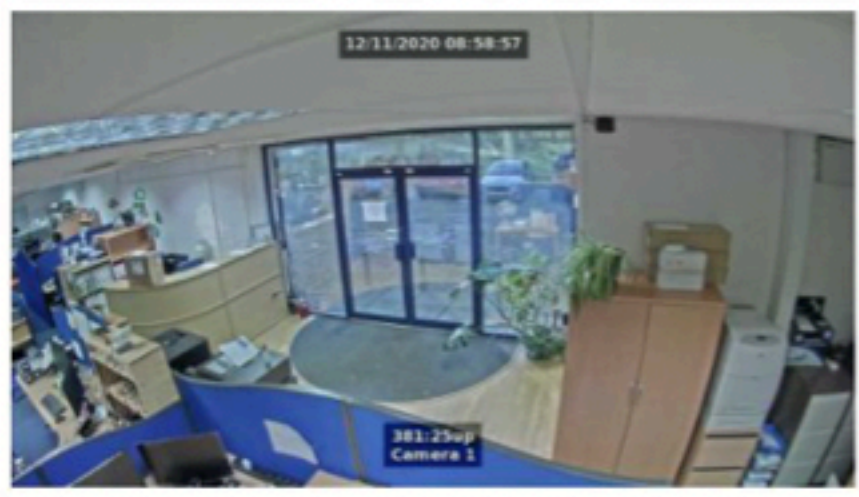
⚙ System

AfterBurner-IP S/N: 1039
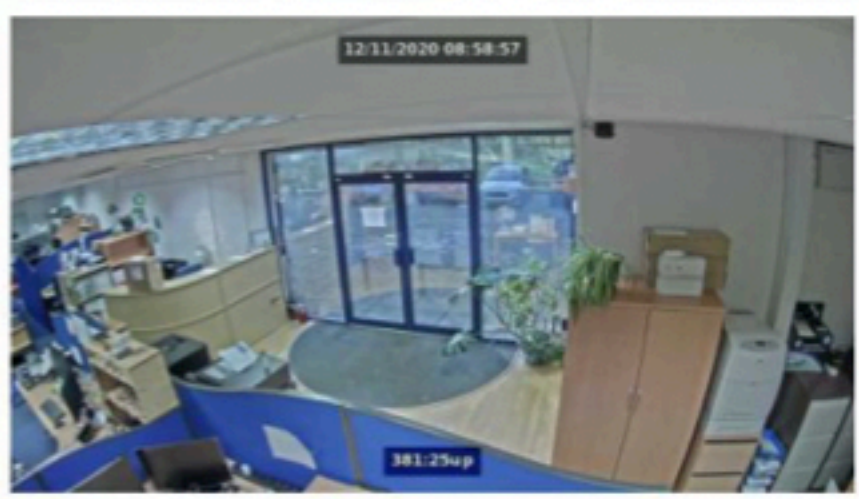
🖼 Preview Camera 1   ▶ Stream   ⤢

🖼 Preview Camera 2   ▶ Stream   ⤢

🖼 Preview Camera 3   ▶ Stream   ⤢

🖼 Preview Camera 4   ▶ Stream   ⤢

▶ Preview Mode: Periodic   🖼 Preview Cameras

⊙ Record Status: recording

↻ Periodic	🎥 Oneshot

⊙ Start Record	◻ Stop Record
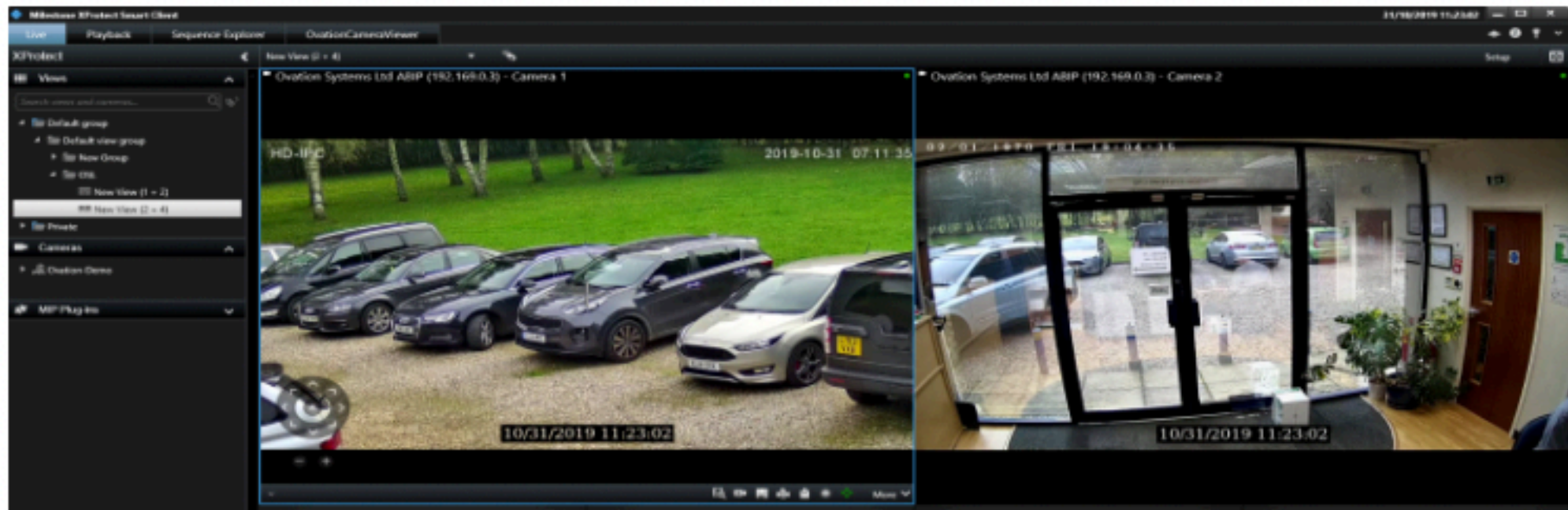
AfterBurner-IP Interfacing to Milestone as 2 x Onvif Cameras
(left-hand camera shown is PTZ)
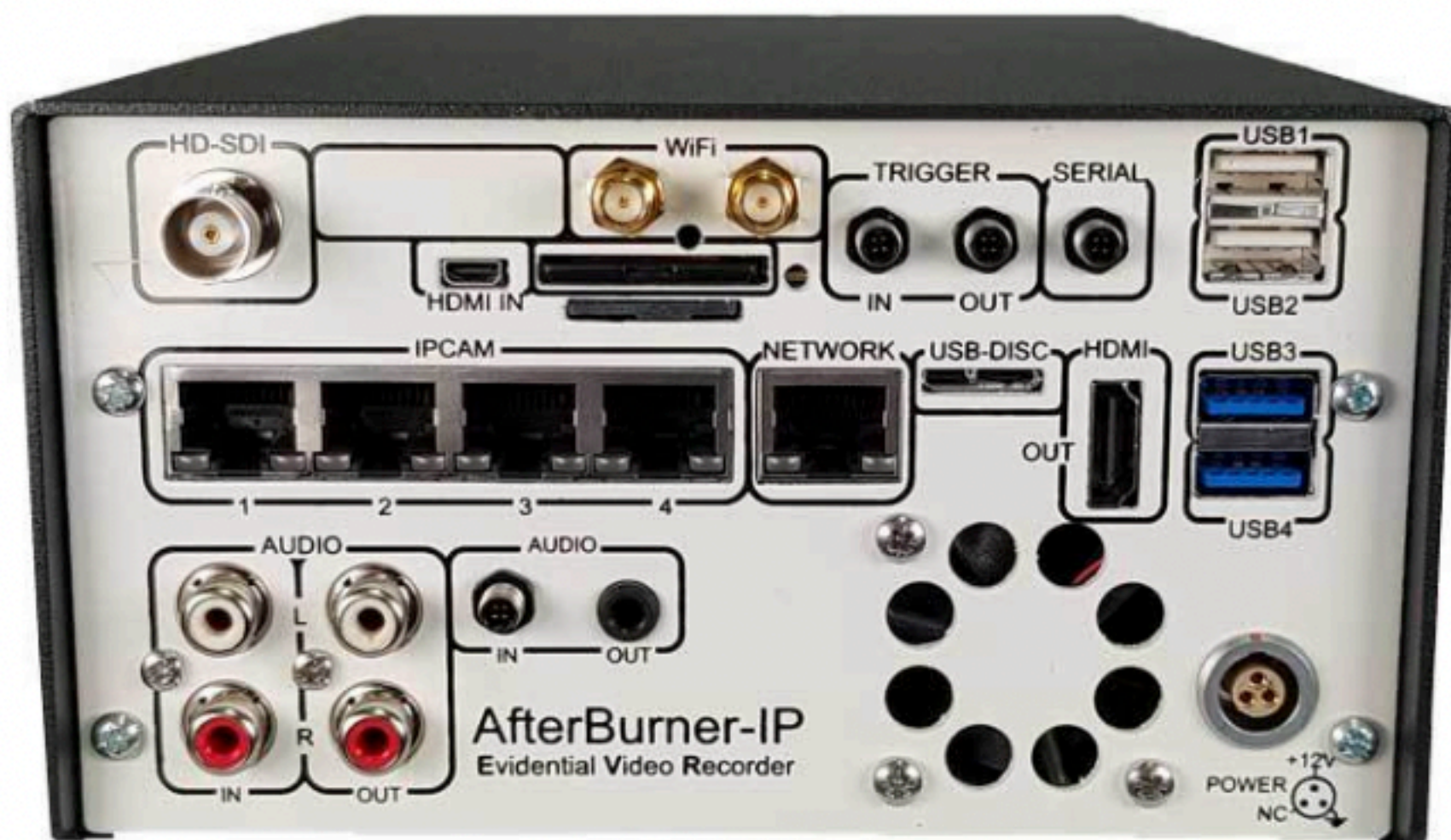
Operating temperature	-10 to +50°C with removable solid state disk, 0 to 40°C with mechanical drive.
Mechanical size:	155 x 90 x 260 mm (as previous AfterBurners).
Finish:	Black painted aluminium.
Weight:	2.2kg approx
Standard accessories:	Mains PSU, user guilde, power lead.
Operating voltage range:	10 to 14 V DC.
Typical power consumption:	~12 Watts (~1A @ 12V) plus any power consumed by connected POE cameras.
Internal hard disk drive:	Embedded and encrypted 500 GB SATA drive acting as hot-swap memory buffer. Linux Ext4 format.
Removable drive:	Removable 2.5" SATA drive, Windows exFat format. 500GB SSD supplied by default.
Power-up record time:	Typically 30 seconds.
Record control by:	Local start / stop button. 2 external control inputs activated by contact to ground. 4 internal timers. Zoned video motion detection.

Rear Panel Connectors:

IP Camera inputs:	4 x Ethernet RJ45 with power-over-Ethernet,100Mbps with DHCP server.
Network	1 x Ethernet 1Gbps, static or DHCP addressing.
HDSDI:	Optional 1 x HDSDI input @ 1080p/30/25 or 720p/60/50/30/25. Embedded audio supported.
mini-HDMI in*:	TBA (possible future use).
HDMI out*:	Audio and video camera monitor output (Expected with V1.1, Spring 2021)
RCA Phono audio in:	2 x line level at 1Vpp max.
RCA Phono audio out:	Line level monitor of the audio after digital processing, mic gain etc. (V1.1).
i-Conex audio in:	2 x mic / line inputs + mic bias. Mic input has AGC by default.
Audio 3.5mm jack socket:	Audio monitor output (after mic gain) with headphone drive (V1.1).
i-Conex trigger in:	2 x contact to ground inputs with record OK output at +5V @ 250mA.
i-Conex trigger outputs*:	2 x pull to ground when active outputs. 0,5,12V @ 0.5A switchable power output (function TBA).
i-Conex serial (RS232)*:	RS232 interface plus switchable 5V @0.5A (function TBA).
USB 1& 2:	USB2 ports to internal processor.
USB 3 & 4:	USB3 ports to internal processor.
WiFi SMAs:	802.11n Wi-Fi interface. Access point and client modes supported.

Video:

IP video format:	4 X RTSP, H.264 compression at 720 or 1080p resolution. Frame-rates up to 60 fps. Supports Onvif discovery of cameras.
Recorded file format:	MP4. Separate folder per day and folder per camera. AAC audio compression.
Video quality adjustment:	5 levels.
Video record rate:	Full rate to 1 frame per second.
Record pre trigger:	Fixed at 2 seconds.
Re-stream:	H.264 RTSP re-stream of the 4 inputs with programable resolution, bit & frame rates. AB-IP is discoverable as a 4 channel Onvif-s device. Adaptive streaming to track variable network bandwidth (eg over 4G).

Audio:

Number of channels:	2
Audio inputs:	Analogue, HDSDI embedded audio, selected RTSP camera stream*
Security features:	SHA256 hash coding of files. Optional AES 128/256 encryption of the internal/removable drives. Internal IPSec and Open VPNs*
	* available via future firmware upgrade

Due to continual product development Ovation Systems reserve the right to change specifications without notice. E&OE.