PHOENIX Ai
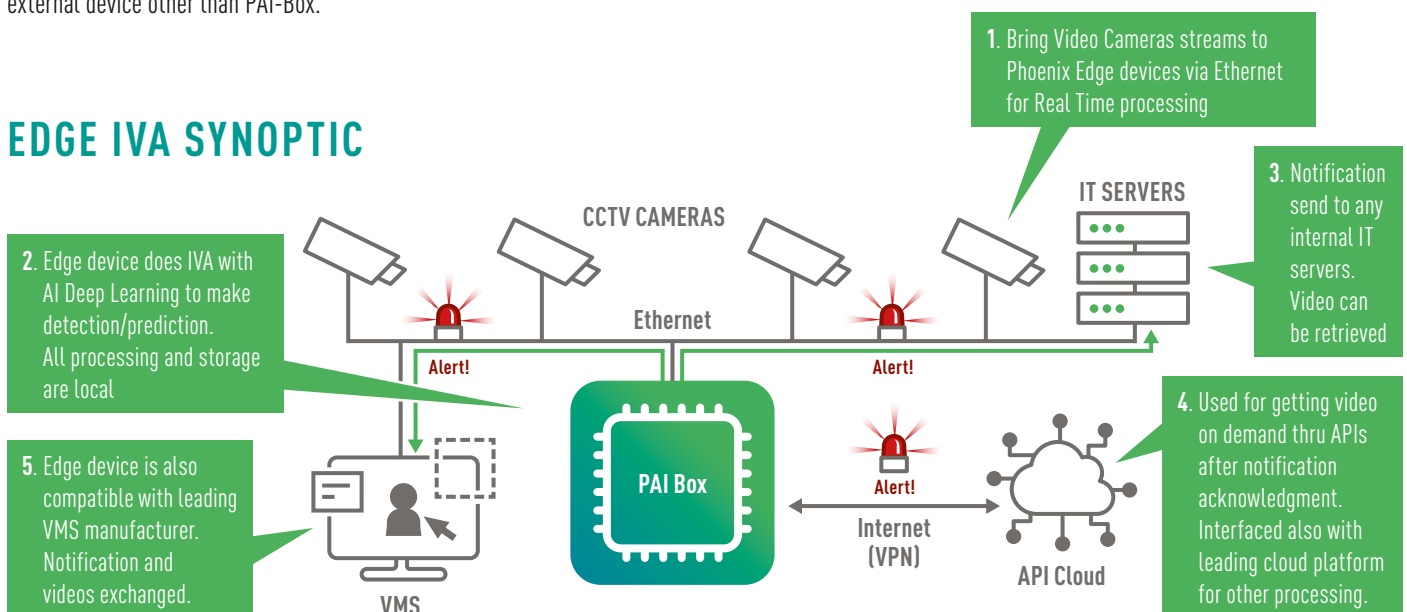## EDGE ON-DEVICE AI - INTELLIGENT VIDEO ANALYTICS

PAI Box

MAIN OPERATING FEATURES

▶ Up to 4 camera streams supported with four AI models

▶ Simultaneous AI detections and deep learning for each stream.

▶ PoE in and PoE out for one camera

▶ Compatible with any IP camera

▶ Cloud Connection for firmware update and AI model improvement

▶ Interfaces with VMS systems such as Milestone and Genetec

▶ Industrial grade design with passive dissipation (fanless)

With PAI Box, Phoenix AI introduces its first industrial grade Edge device to host Phoenix AI IVA (Intelligent video Analytics) Applications. The product has been designed around NVidia™ embedded GPU in order to analyze and detect events on 4 independent video streams fed by cameras connected on its Ethernet PoE network interface. All image processing are done in real time supporting up-to 60 frames per second. Images can be stored on the device internal SSD which can be extended to 35 days 24/7 1080 pixels, avoiding the need to save images on external device other than PAI-Box.

EDGE IVA SYNOPTIC

1. Bring Video Cameras streams to Phoenix Edge devices via Ethernet for Real Time processing

3. Notification send to any internal IT servers. Video can be retrieved

2. Edge device does IVA with AI Deep Learning to make detection/prediction. All processing and storage are local

5. Edge device is also compatible with leading VMS manufacturer. Notification and videos exchanged.

4. Used for getting video on demand thru APIs after notification acknowledgment. Interfaced also with leading cloud platform for other processing.

CCTV CAMERAS

IT SERVERS

Ethernet

Alert!

Alert!

Alert!

PAI Box

Internet (VPN)

API Cloud

VMS

Each Anomaly/issue (depending on the AI models detection) triggers an alert associated with a short time video clips which can be either retrieved later on for monitoring form an external IT server (thru APIs) , from Phoenix AI cloud application or from a VMS system.

PRODUCT SPECIFICATIONS

PoE In (Powered Device)	IEEE 802.3bt - 62W (50V to 57V)
PoE Out (Power Sourcing Equipment)	IEEE 802.3af - 15.4W (44V to 57V), 1 camera device can be powered. 13W effective for the PD camera.
Power in on plug terminal	12V to 57V DC (needs min. 44V DC to allow PoE Out)
GPU	Xavier 384-core NVIDIA Volta™ GPU with 48 Tensor Cores with up to 1100MHz
Electrical Power	11W to 25W (depending on the application), without Powered Device (i.e.: Camera)
Computational power on edge device	Up to 4 camera streams, up to 60FPS in 1080p, with up to 4 simultaneous detections with artificial intelligence and deep learning for each stream. Multiples streams are delivered from a LAN.
SSD Storage	**Standard :** Up to 2 days 24/7 1080p (H264, bitrate 4096, 25 fps) video storage for 1 stream **Optional :** Up to 35 days 24/7 1080p (H264, bitrate 4096, 25 fps) video storage for 1 stream; Ordering reference: see below
Connectivity	GbE In and 100Mbps Out
PoE Ports	RJ45: 1 in (front left) and 1 out (front right)
Cooling (Passive)	Heatsink in casing - Casing may be normally hot
Casing Dimensions	W 120 x H 70 x D 200 mm without connector and raildin clip
Overall weight	1.2 Kg
Environmental - Ingress protection	IP50
Ambiant Air T° Ranges	Operations: From -20°C to 70°C, 10 to 95% relative humidity (non-condensing). Storage: From -40°C to 85°C, 10 to 95% relative humidity (non-condensing).
I/Os	Two digital inputs, One digital output (optional)

PRODUCT ORDERING INFO

▶ PAI_BOX : PAI BOX 4 camera streams

▶ PAI_BOX_STK : PAI BOX, starter kit for 1 camera stream

▶ PAI_STORAGE : 35 days storage upgrade

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