

Sales Brief

Understanding IVA Licensing



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Introduction

Bosch Security Systems offers the option to increase the level of intelligence of its IP-based edge devices through the activation of Bosch's Intelligent Video Analysis, or IVA. The capabilities and reliability of IVA has continued to increase to the current capabilities offered through v4.0. This document explains which version of IVA may be used with which edge device. It is useful to realize that IVA feature set is derived from the installed firmware, not the type of IVA license. The license is a device-specific activator.

Simplified IVA Licensing Scheme

Bosch recommends the use of the new and simplified IVA licensing scheme, as summarized in **TABLE 1** below. The simplified IVA licensing scheme only depends on whether it is an IP camera or not, and how many channels the encoder has. Specifically it ignores the exact model type number, i.e. it doesn't care whether it is a Dinion IP or a FlexiDome IP camera.

The new scheme can be used on firmware v3.x or 4.x, with the only difference being the IVA functionality delivered with that firmware. It is understandably confusing that it is often referred to as IVA 4.0, when in fact it should be simply referred to as IVA.

TABLE 1

IVA Simplified Licensing Scheme	
License	Description
MVC-FIVA4-CAM	IVA 4.0 FOR IP CAMERA
MVC-FIVA4-ENC1	IVA 4.0 FOR SINGLE CHANNEL ENCODER
MVC-FIVA4-ENC2	IVA 4.0 FOR DUAL CHANNEL ENCODER
MVC-FIVA4-ENC4	IVA 4.0 FOR QUAD CHANNEL ENCODER

For devices such as Dinion IP, VideoJet X encoders etc., Bosch recommends the new and simplified IVA licensing scheme (**TABLE 1**). The same functionality is available through the use of the model-specific FS3 IVA license, e.g. NWC-04X5-FS3. Such a license is equally valid with 3.x and 4.x firmware. The different firmware simply gives different levels of functionality.

Please note that with the release of IVA 4.0 the model-specific FS3 licenses are made EOL and no new purchases can be made. However it may that customers still hold stock, or have recently purchased a license.

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Devices licensed with an FS3 IVA license running on firmware 3.x, can have their firmware upgraded to 4.x and the FS3 IVA license will still be valid. IVA 4.0 functionality, delivered by the 4.x firmware, will be instantly available. The devices shown in **TABLE 2** below can run IVA v3.x or 4.0.

TABLE 2

Device Compatibility			
Category	Edge Device	Firmware 3.x	Simplified IVA (valid on f/w 3.x and 4.x)
Dinion IP			
	NWC-0455	NWC-04X5-FS3	MVC-FIVA4-CAM
	NWC-0495	NWC-04X5-FS3	MVC-FIVA4-CAM
FlexiDome IP			
	NWD-455	NWD-4X5-FS3	MVC-FIVA4-CAM
	NWD-495	NWD-4X5-FS3	MVC-FIVA4-CAM
AutoDome IP			
	AutoDome Modular 100 Series (with IP)	VG4-A-FS3	MVC-FIVA4-CAM
	AutoDome Modular 200 Series (with IP)	Not Available	MVC-FIVA4-CAM
	AutoDome Modular 300 Series (with IP)	Not Available	MVC-FIVA4-CAM
	AutoDome Modular 500i Series (with IP)	Not Available	MVC-FIVA4-CAM
Extreme IP			
	EX7-IP, EX30-IP, EX36-IP, EX80-IP and EX82-IP cameras	NEA-IP200B-FS3	MVC-FIVA4-CAM
IP Encoders			
	VideoJet X10S	VJT-X10-FS3	MVC-FIVA4-ENC1
	VideoJet X10 SN	VJT-X10SN-FS3	MVC-FIVA4-ENC1
	VideoJet X20S	VJT-X20-FS3	MVC-FIVA4-ENC2
	VideoJet X20 SN	VJT-X20SN-FS3	MVC-FIVA4-ENC2
	VideoJet X40S	VJT-X40-FS3	MVC-FIVA4-ENC4
	VideoJet X40 SN	VJT-X40SN-FS3	MVC-FIVA4-ENC4
	VIPX1600M4S module	VIP-X1600-FS3	MVC-FIVA4-ENC4
	VIPX1600M4SA module	VIP-X1600-FS3	MVC-FIVA4-ENC4



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H.264-Only Devices

The only device that only generates pure H.264 video, and no MPEG-4, is the brand-new VIP-X1600-XFM4A or the Bilinx version VIP-X1600-XFM4B. These modules will only run IVA 4.x and firmware 4.x, and you must use the new license for this.

Since these are 4-channel units, the license is MVC-FIVA4-ENC4, IVA 4.0 FOR QUAD CHANNEL ENCODER

It is **not possible** to run a 3.x firmware on these modules.

It is **not possible** to use the old FS3 licensing on these modules, i.e. VIP-X1600-FS3.

TABLE 3

Device Compatibility			
Category	Edge Device	Firmware 3.x	Firmware 4.x
IP Encoders			
VIP X1600			
	VIP-X1600-XFM4A module	Not Available	MVC-FIVA4-ENC4
	VIP-X1600-XFM4B module	Not Available	MVC-FIVA4-ENC4

Pricing

Bosch believes its video analytics offering, IVA, should be accessible to the masses, for use in quite ordinary situations as well as highly critical ones, ranging from inconveniently parking in front of a school gate to loitering at the perimeter of a petro-chemical facility to driving the wrong way down a street.

To achieve that, Bosch developed IVA from scratch, using entirely Bosch resources which had experience in cars that could drive themselves on a road by analyzing video in real-time.

This helps Bosch control the capabilities and pricing of the product, since Bosch is not dependent on an EOM product. As such, the cost of IVA has remained the same through version 1.0, 2.0, 3.0 and now 4.0.

It is Bosch's belief that with the recent improvements in setup time and accuracy, IVA will be as common place as regular motion detection. IVA and simple motion detection cannot be compared as apples to apples, since IVA intelligently detects behaviors and not just movement, consequently there is a value associated with this.

This value is reflected in pricing that targets mass-market adoption. Please consult the Bosch Price List for further details.



Performance

In recent years, Bosch has continued to invest in the concept of Intelligence at the Edge.

Before	Now
MPEG-4 streaming	H.264 streaming
Streaming to NVR	Streaming Direct-to-iSCSI and VRM
Simple motion detection	True behavioral IVA and Flow analysis
Simple alarm generation	Full autonomous alarm task scripting

Each step forward places additional workload on the edge device, and so depending on which of the features you use in a system, the performance will be affected. For example: A Dinion IP cannot be guaranteed to perform IVA if it is streaming 25FPS at 4CIF MPEG-4 video direct-to-iSCSI. IVA will take a lower priority to recording and some important IVA alarms may be missed.

H.264 also places a heavy load on edge devices, and in general we do not advise running IVA at the same time as H.264 on the older edge devices (i.e. the devices listed in TABLE 1).

The only exception is the new VIP X1600 XF H.264 module, which has hardware accelerators for both the encoding and the video analytics. This is shown in **TABLE 3**.

E-licensing

With the introduction of the simplified IVA licenses, Bosch is launching electronic licensing. Previously IVA licenses were sent in physical packages, but now they will be emailed. The ordering process is unchanged; it is only the means of delivery that is new.

Electronic licensing has the following benefits:

- Availability - IVA licenses will never be out of stock, since there is no physical product
- Speed – IVA licenses will be emailed the next day
- Recovery – since Bosch will now associate an emailed IVA license code with a customer order, this code can be recovered if lost

Ordering will be via normal channels: upon order, the license is generated and shipped via email to the order desk of the NSO, **which needs to forward it to their customer and produce the invoice locally**. We strongly suggest the local order desks to supply the Ovar order desk with a team email address for this.

For full details, please consult the e-licensing Introduction Presentation.



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Frequently Asked Questions

I have an unlicensed old firmware 3.x Dinion IP.

I need to license with the latest and greatest IVA. What do I do?

Since it is not yet licensed with IVA the purchase the simplified license, MVC-FIVA4-CAM and install it on the camera. Upgrade the firmware to 4.x and you're done.

I have a pre-licensed old firmware 3.x Dinion IP I need to license with the latest and greatest IVA. What do I do?

If it is already licensed, e.g. with the NWC-04X5-FS3, just upgrade the firmware and you're done.

I have a new VIP X1600 XFM4A H.264 module I want to license with IVA.
What do I do?

Purchase the simplified license, MVC-FIVA4-ENC4 and install it on the module and you're done.

The module already ships with firmware 4.x but you may want to confirm you have the latest firmware.