

# How to address fraud in a restaurant

## Security - Video Surveillance



**BOSCH**

Invented for life



Customers who “forget” to pay the bill after having enjoyed a nice meal account for losses in the hospitality industry. Next to customer fraud, employees have also been known to steal. Let’s take a look at how you can minimize fraud and theft in your restaurant:

### **Combat fraudulent behavior**

Cash differences can be caused by fraudulent customers or staff. For example, credit card fraud is noticed typically at the end of the day, when a cash difference is shown but the customer has already left. Or when a waiter doesn’t use the point of sale to register an order; he/she is effectively stealing. Our video system provides the highest quality of relevant IP video images, so you can review what has happened at anytime from anywhere.

### **Safeguard staff from harm**

It’s important to protect employees against violent customers. Should a customer become violent, our video surveillance system can be used to give evidence to the investigating authorities.

### **Keep an eye on your valuables**

To attract guests your restaurant needs to have an inviting and open atmosphere. This also makes it easy for people to steal art, silverware, or other valuables. However, the visible presence of a video surveillance system will deter most people from theft.

### **Create a more secure outdoor environment**

Because of their open nature, parking lots can involve a great deal of risk – especially at night. The most common violent crimes committed in parking lots can be purse snatching, carjacking, and abductions. Our video surveillance system will deter break-ins and vandalism, and therefore will help create a more secure environment.

Bosch Security Systems has the answer.

# Example of a restaurant under video surveillance



The above schematic gives an example of how to increase security within your restaurant

- 1 Several cameras are used to keep an eye on the general areas. The restaurant area itself is not monitored out of respect for customer privacy.
- 2 A camera above the cashier's desk safeguards against employee fraud.
- 3 A camera watches the entrances to your kitchen to help you check who entered/exited and at which time and date.
- 4 A camera is installed at the management office door to register who enters.
- 5 A camera at the delivery entrance monitors the goods delivery process.
- 6 An outdoor camera at the parking zone safeguards against property theft or damage.
- 7 The central video recorder can record and replay up to 16 cameras. This recorder has the capacity to store weeks of video.  
[Calculate your required storage capacity.](#)
- 8 Our intelligent software allows you to view all cameras, replay video, or find specific occurrences on your PC or mobile device.

## Installers information



### High-quality images

With any surveillance system, you need to see clearly what is going on in the image. That's why Bosch IP cameras are equipped with our Content Based Imaging Technology (CBIT) to ensure that camera settings are continuously and dynamically adjusted depending on movement, varying light intensity, and back- and front-light fluctuations. Intelligent Dynamic

Noise Reduction (IDNR), a part of CBIT, is responsible for significantly reducing bitrates and therefore storage costs. Quiet scenes with little or no movement require a lower bitrate. By intelligently distinguishing between noise and relevant information, such as movement, IDNR reduces bitrate by up to 50%. Because noise is reduced at the source during image capture, the lower bitrate does not compromise on video quality. Network strain is

reduced by only using bandwidth when needed.

**No need to watch hours of video**

All Bosch cameras can give an alarm when there are changes in the image, for instance when someone is walking by. These alarms can trigger the sending of a corresponding image to your mobile device, so you'll know right away that something is happening. Or you could scroll through these triggers later to find out what went on.

**Water-, dust- and vandal-resistant**

Our outdoor dome camera is protected against water and dust (IP66). In addition, it is suitable for installations where vandal-resistance is important (IK10). At night the camera switches to night-time imaging while maintaining sharp focus under all lighting conditions.

**Access your images via your mobile device**

Limited bandwidth makes it impossible to stream HD video on mobile devices. That's why Bosch uses Dynamic Transcoding to deliver both smooth live video streaming and instant access to HD still images when needed, regardless of available bandwidth. As you cannot be everywhere all the time, you can now use your mobile device to access camera controls, live video streams and

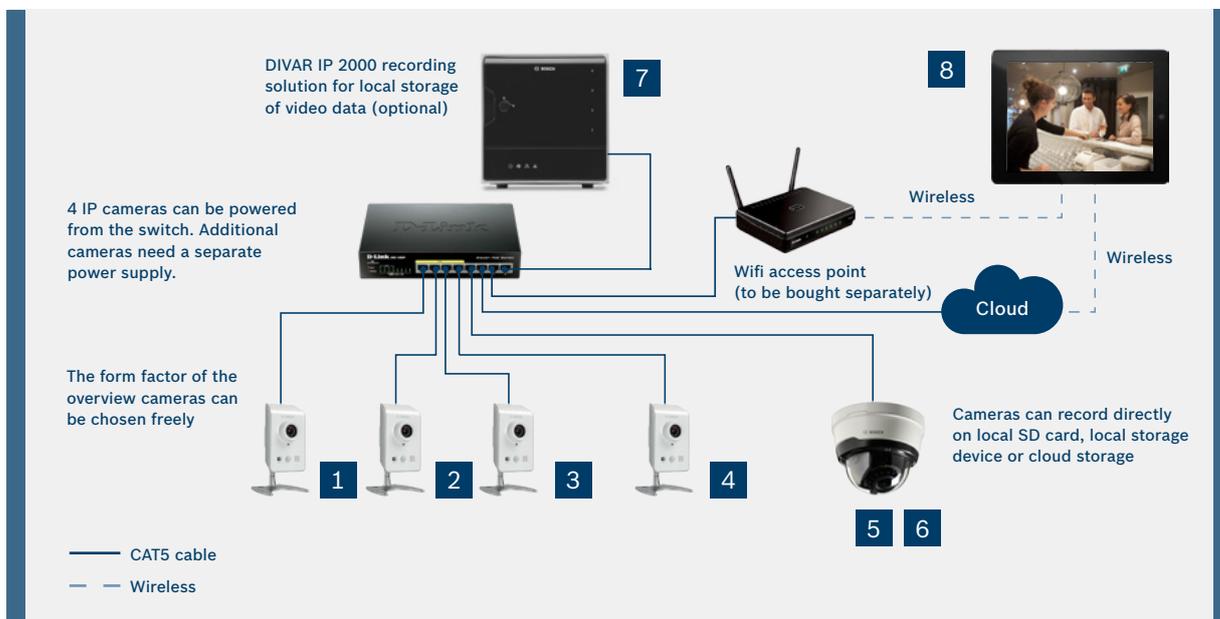
HD images anytime, from anywhere. Dynamic Transcoding also enables you to instantly retrieve the correct video data from hours of recorded material (only in combination with the DIVAR IP 2000).

**Safe storage of video content**

You can choose how your video surveillance images are stored.

- 1. Storage within the camera:** use a MicroSD card for local alarm recording, i.e. recording will take place only when the camera detects movement in the image. All recordings on MicroSD cards can be exported to your central storage or PC. The camera's internal slot supports MicroSD cards of up to 2 TB. (SD cards to be purchased separately).
- 2. Central storage:** add our DIVAR IP 2000 to record video from up to 16 cameras. This provides safe data storage, 24/7 remote access and offers advanced features to manage your video data. Storage capacity can be expanded to up to 8 TB.
- 3. Cloud storage:** our system is directly compatible with Dropbox™ to store still images automatically in the cloud. As soon as certain motion is detected by the camera, these still images will be generated. This will enable you to view these images from your PC or smartphone, wherever you are.

# Example of an IP video surveillance system



# Products used in this example

Image	Product name	Ordering code	Corresponds with number in drawing on pages 2 and 3.	Description	Starterkit, DIP-2042 EZNPC22**
<b>Cameras - Indoor</b>					
	FLEXIDOME IP micro 2000	NUC-20012-F2	1 2 3 4	Indoor IP microdome, 720p MicroSD card slot for edge recording * Motion, tamper and audio detection FTP, Dropbox and e-mail application	
	TINYON IP 2000 PIR	NPC-20012-F2L-W	1 2 3 4	Indoor IP camera, 720p SD card slot for local recording * PIR-based motion and audio detection Integrated white light for night time viewing FTP, Dropbox and e-mail alarms	4x
<b>Cameras - Outdoor</b>					
	FLEXIDOME IP outdoor 4000	NDN-41012-V3	5 6	Outdoor IP dome camera 720p with varifocal lens Select regions of interest and E-PTZ	
<b>Recorders and network</b>					
	DIVAR IP 2000	DIP-2042EZ-2HD	7	Video recording solution for up to 16 cameras. Storage up to 8TB capacity. Remote viewing via Video Security app and video client by Bosch. Helpful install wizard	1x
	Switch	Switch, D-Link DGS-1008P	7	Switch to connect up to 6 cameras, DIVAR IP 2000 and internet Speed of 1GB/s 4 ports will provide PoE	1x
<b>Software</b>					
	Video security app iOS	Video security app	8	Connect your mobile device via this app to your Bosch IP cameras and experience video playback and access your recordings.	Free of charge
	Video security app Android	Video security app	8	Connect your mobile device via this app to your Bosch IP cameras and experience video playback and access your recordings.	Free of charge
	Bosch Video Client	Bosch Video Client	8	To view multiple sites or cameras simultaneously, Bosch provides the free of charge Video Security Client. This viewing software supports desktops, 2-in-1 laptops and mobile devices running Windows 8. It supports intuitive control via touch screen or mouse and keyboard operation to ensure maximum user friendliness.	Free of charge up to 16 cameras

\* Remark: SD card not included within cameras

\*\* Your complete system could consist of a starterkit and separate products

## Bosch Security Systems

To learn more about our solutions, please visit [emea.boschsecurity.com](http://emea.boschsecurity.com)

To learn more about Video Systems, please visit [www.boschsecurity.com/hdsecurity](http://www.boschsecurity.com/hdsecurity)

© Bosch Security Systems, 2015  
Modifications reserved  
Printed in the Netherlands

## Disclaimer

This application note depicts non-binding information. All assessments, analysis, recommendations or conclusions contained herein are non-binding examples and are strictly limited to the products manufactured by Bosch Security Systems. The reading of this application note does not replace in any case the individual consultancy through an authorized installer. Literal mistakes are not excluded. Bosch Security Systems cannot be held liable as a result of any installation work made by you or any third party based on this non-binding application note. Further, Bosch Security Systems is not responsible for testing and establishing the suitability of their system for your intended purpose and you are solely responsible for the overall system installed. Please observe the local regulations.

BOSCH SECURITY SYSTEMS ASSUMES NO RESPONSIBILITY FOR INACCURACIES OR OMISSIONS AND SPECIFICALLY DISCLAIMS ANY LIABILITIES, LOSSES, OR RISKS, PERSONAL OR OTHERWISE, INCURRED AS A CONSEQUENCE, DIRECTLY OR INDIRECTLY, OF THE USE OR APPLICATION OF ANY OF THE CONTENTS OF THIS DOCUMENT.

