# **Dinion and FlexiDome camera family**Reveal every detail with 2X camera technology

A complete range of fixed-body and fixed dome surveillance cameras





# Revealing the Dinion and FlexiDome camera family

Reveal the details of your surveillance images with Dinion and FlexiDome cameras from Bosch. When clarity counts, you can rely on cameras to give you the best level of detail to match your application, and your budget.

Whatever your surveillance application demands, there's a solution to meet your needs in the family of analog cameras. The range includes our advanced Dinion 2X and FlexiDome 2X models together with the high performance DinionXF and FlexiDomeXF and professional standard Dinion, FlexiDomeXT+ and FlexiDome VF cameras. There's a choice of color or monochrome options, as well as complete FlexiDome camera systems incorporating the same, excellent technology.



# Dinion 2X and FlexiDome 2X

# the clearest images, day or night

Giving you a clearer view in the most difficult locations, our Dinion 2X and FlexiDome 2X cameras bring the highest level of image quality to your surveillance applications.

# Dinion 2X and FlexiDome 2X Day/Night images in all conditions

Dinion 2X and FlexiDome 2X cameras are built on our innovative Dinion 2X Digital Signal Processor (DSP) technology. The Dinion 2X DSP works in combination with our proprietary wide dynamic range (WDR) CCD sensor to deliver the world's first 20-bit image processing for the CCTV market. Both our Dinion 2X and FlexiDome 2X solutions take advantage of this technology to provide excellent low light and WDR performance in many difficult lighting conditions, including day/night applications.

# DinionXF and FlexiDomeXF – color performance even in difficult lighting

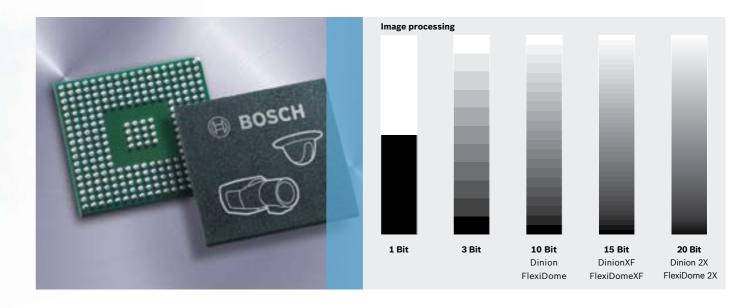
Reveal details conventional color cameras miss.

The DinionXF and FlexiDomeXF combine 15-bit digital video processing with XF-Dynamic to deliver very good picture performance in a range of color applications.

# **Dinion and FlexiDome - professional performers**

In locations well lit by natural or artificial lighting, our 10-bit Dinion and FlexiDome cameras are the ideal solution. These professional-standard CCTV cameras deliver crisp, clear pictures and high quality images you can rely on.





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# FlexiDome 2X camera

# the finest image quality, day or night

Need a dome camera with the highest quality surveillance images? Look no further than the FlexiDome 2X Day/Night solution. It combines the exacting performance of our advanced Dinion 2X DSP and WDR sensor with a very tough, yet stylish, dome.

## Tough enough for almost any application

From arctic temperatures to blazing sun or heavy rain, the FlexiDome 2X system handles it all. It's strong too, able to cope with rough treatment in demanding locations.

# Clear images in very difficult lighting

Strong backlighting or high contrast scenes are no problem for the camera's wide dynamic range performance, while low light situations are handled easily by its highly sensitive CCD sensor, ensuring high quality image capture day or night.

Smart BLC with automatic configuration for easy setup Back of camera completely sealed against water, dust and other contaminants (IP66/NEMA4X BOSCH environmental rating) for easy installation and camera integrity Impact resistant bubble and construction exceeding IK10 rating (> 50 Joules of energy) Privacy masking to hide sensitive scene content Day/Night operation with infrared light

## ► CCTV 20-bit image processing

Bosch's 2X DSP and proprietary wide dynamic range (WDR) CCD sensor produce 20-bit image processing

## ► See more in harsh lighting conditions

The superior WDR handling for all lighting conditions reveals details previously unseen in 24 hour applications using pixel by pixel analysis

# Smart backlight compensation (BLC) Simply turn Smart BLC on and the camera will

automatically compensate the image without compromising WDR

### ► Detail enhancement

AutoBlack applies enhancement to the whole scene, while sharpness automatically enhances each pixel

# ► Guaranteed performance around the clock See clear images both day and night as the 2X image processing dynamically adapts to scene changes.

There's also compensation for IR illumination

# ► Convenience of a complete package Stylish, rugged dome, advanced FlexiDome 2X camera and choice of optimized, high-speed lenses

# **▶** Discreet surveillance

Aesthetic design style, easy to install

# ► Suitable for locations exposed to the elements Weather resistant, IP66 / NEMA4X environmental rating against dust, water and other contaminants. The surface mount box (SMB) offers complete IP66

protection for the power and video cables

## ► No application is too tough!

Impact resistant bubble and construction exceeding IK10 rating (> 50 Joules of energy)

## Typical applications:

- ► Entrance foyer/lobby with glass
- ► Warehouses and loading bays
- ▶ Prisons and correctional facilities
- ► Airport locations including:
- baggage handling
- fuel and equipment storage
- ► Stadium



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# FlexiDomeXF camera -

# discreet surveillance, virtually anywhere

The FlexiDomeXF camera features the award-winning performance of our proprietary 15-bit imaging technology. FlexiDomeXF comes in a range of domes that are tough enough for almost any situation, yet stylish enough to be mounted in any location.

#### **Discreet and secure**

The FlexiDomeXF camera gives you the discreet, attractive appearance and robustness of a dome, combined with FlexiDomeXF camera performance. Able to cope with difficult lighting conditions, you can put these compact, integrated dome solutions in many applications.

## ► Sharp images, whatever the lighting

Default shutter automatically chooses between a fast or standard shutter speed. In normal light, the fast shutter captures movement without blurring, while the standard shutter maintains the camera's full sensitivity in low light conditions

- ► Clearer detail where it matters most in the image Programmable backlight compensation (BLC)
- ► Convenience of a complete package Stylish, rugged dome, advanced FlexiDomeXF camera and choice of optimized lenses
- ► Suitable for exposed locations, from arctic conditions to blazing sun or heavy rain Weather resistant, IP66 / NEMA4X environmental rating against dust, water and other contaminants
- ► No application is too tough! Impact resistant bubble and construction exceeding IK10 rating (> 50 Joules of energy)

# FlexiDomeXT+ camera -

# **Dinion performance in a dome**

Great for discreet outdoor surveillance, our FlexiDomeXT+ camera makes an extremely affordable solution for well lit applications. It combines renowned Dinion performance and 10-bit image processing in a tough dome. Or, if you don't need the weather-resistant capabilities, our FlexiDomeVF model offers the ideal indoor alternative.

#### **Easier installation**

As complete solutions, these compact and integrated cameras make system design and installation simple and quick.

- ▶ Suitable for locations exposed to the elements, from arctic conditions to blazing sun or heavy rain Weather resistant, IP66 / NEMA4X environmental rating (FlexiDomeXT+)
- ► More precise recognition Superior image quality given by 540 TVL
- ► Convenience of a complete package Stylish, rugged dome, advanced FlexiDome camera and choice of optimized lenses
- ► No application is too tough! Impact resistant bubble and construction exceeding IK10 impact rating (> 50 Joules of energy)
- **▶** Programmable

Use the camera key buttons, OSD or Bilinx remote connection for easy camera set-up

## **Typical applications:**

- ► Stairwells and staircases
- ► Elevators/lifts
- ► High security storage such as bank vaults
- ► Car parks (indoor)
- ► Hotels, bars and nightclubs
- ► Hospitals and medical centres



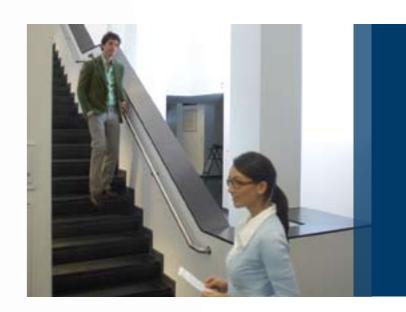




along a ceiling or surface

## **Typical Applications:**

- ► Museums and art galleries
- ► Shopping centres (general surveillance)
- ► Offices and shop queuing zones
- ► Climate controlled and illuminated rooms
- ► Hallways/corridors
- ► Schools, colleges and universities



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# Putting your FlexiDome camera to work







Want to know which type of FlexiDome solution to use in your applications? You'll find just a few ideas on this page.

# **Camera image**

## Lifts & entranceways.

Backlit areas make the area of interest dark, hiding features. Compensate with smart backlight compensation (BLC).

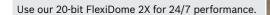
FlexiDome 2X gives you the best results, but FlexiDomeXF may also be used if conditions are not too severe.

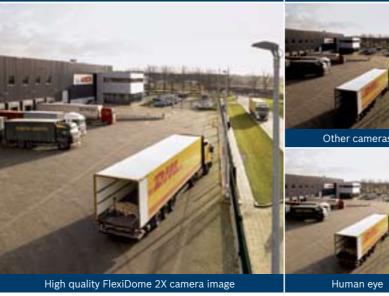




# Pedestrian and vehicle traffic.

Need sharp images in busy locations? Combine high dynamic range with colour sensitivity.

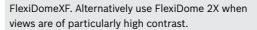




# Camera image

## Fuel storage.

Details can be hidden in shadow and difficult to see with all the movement. Use cameras with XF Dynamic.







# Reception centre.

Lots of activity requires a detailed, sharp picture over the whole scene. Use cameras with 540 TVL resolution.

Featuring 540 TVL, FlexiDome (including FlexiDome 2X and FlexiDomeXF) offers discreet surveillance.



High quality FlexiDome 2X camera image

Other cameras



# Dinion 2X advanced smart surveillance camera

The flagship of the Dinion range, the 20-bit Dinion 2X Day/Night camera gives you a powerful solution capable of handling the most demanding lighting situations, 24 hours a day. Optimized for both natural and artificial light, this flexible fixed-body camera ensures you always get the best results, whatever your specific requirements. Bosch 2X image processing is 32 times more powerful than DinionXF's 15-bit capabilities!

Smart backlight compensation, 6 user-programmable modes and a built-in test pattern generator offer easy, out-of-the-box installation.

# Better than the naked eye

Strong backlighting or high contrast scenes are no problem for the camera's wide dynamic range performance, while low light situations are handled easily by its highly sensitive CCD sensor. Fully automatic detail enhancement analyzes the image pixel by pixel. In very difficult lighting, the Dinion 2X produces images that reveal details which cannot be seen by the human eye.

## Revealing detail in the most extreme lighting

CCTV cameras are often used in harsh lighting, where the difference between the brightest and the darkest parts of a scene can be extreme. To help Dinion 2X produce a clear picture in these conditions the camera's CCD sensor generates two images: one long exposure to resolve details in the scene's darkest areas, and one short exposure to resolve details in the scene's brightest areas. The Dinion 2X DSP combines these 'dual shutter' images, mixing pixels from each exposure to produce the most detailed image possible.



#### ► CCTV 20-bit image processing

Bosch's 2X DSP and proprietary wide dynamic range (WDR) CCD sensor produce 20-bit image processing

## ► See more in harsh lighting conditions

The superior WDR handling for all lighting conditions reveals details previously unseen in 24 hour applications using pixel by pixel analysis

### ► Smart backlight compensation (BLC)

Simply turn Smart BLC on and the camera will automatically compensate the image without compromising WDR

#### ► Detail enhancement

AutoBlack applies enhancement to the whole scene, while sharpness automatically enhances each pixel

#### ► Guaranteed performance around the clock

See clear images both day and night as the 2X image processing dynamically adapts to scene changes.

There's also compensation for IR illumination

# Easy cable compensation, even when camera is mounted

Removable power and alarm cable connectors

## ► Takes the heat

High efficiency power supply improves maximum operating temperature and increases product lifetime

# ► Wide user compatibility

Multi-language OSD (On-Screen Display)

## ► Hide any part of a scene

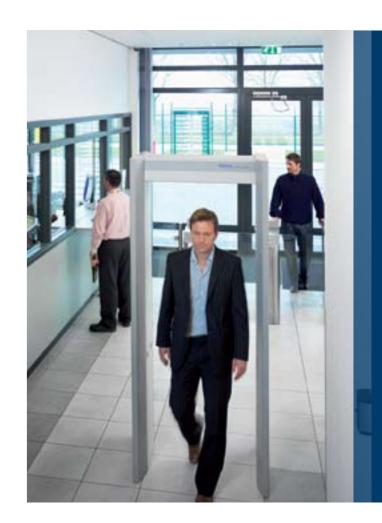
Privacy zones allow you to block specific parts of a

# ► Built in test pattern generator (TPG)

Produce signals to test and fault-find cables

# Typical applications:

- ► Entrance foyer/lobby with glass
- Outdoor perimeters
  - -low light / IR light
- ► Traffic monitoring
- highway intersections / emergency response
- ▶ Tunnels
- ► Car parks (outdoor)
- ► Restricted access locations such as:
  - prisons / ports / freight terminals / military
     facilities / border control and homeland security
- ► Casino and gambling centres



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# DinionXF high performance

# smart surveillance camera

The DinionXF fixed-body camera combines 15-bit digital video processing with XF-Dynamic to delivery very good color picture performance even under difficult lighting

# Extra detail in bright and dark scenes

DinionXF cameras are ideal indoors or outdoors, with either artificial or natural lighting. Our color models perform when there is at least a low level of natural lighting, while our B/W models give better results in artificial light, such as IR illumination.

#### The natural choice

DinionXF is the natural choice for high-performance professional surveillance systems. Its many image enhancement features ensure great performance, straight from the box.

# ► Vivid video pictures

Capture more true-to-life images - the DinionXF's 15-bit processing power generates images that are 32 times better than those of standard 10-bit cameras

### ► Good WDR handling

The DinionXF provides good WDR performance to suit less harsh lighting conditions

- ► Sharp images, whatever the lighting In normal light, the fast default shutter captures
- movement without blurring, while the standard shutter maintains the camera's full sensitivity in low light conditions
- ▶ Optimize picture quality in the image's area of interest Programmable backlight compensation (BLC)
- ► Flexible control over greater distances Built-in cable compensation (RG59 = 650 m; RG6 = 1 km)

# Dinion camera:

# a professional performer

In locations well lit by natural or artificial lighting, our 10-bit Dinion cameras are the ideal solution. A professional-standard CCTV camera that delivers crisp. clear pictures, Dinion gives you high quality images you can rely on.

# Benefit from Dinion technology

Dinion cameras deliver excellent video images. They also share many of the benefits of Dinion technology found on our higher-end XF and 2X models. This includes 540 TVL, Lens Wizard, Automatic Lens Detection and ease of set-up.

#### Indoors or outdoors

Whether indoors or outdoors, see the difference with our Dinion cameras.

- ► More precise recognition Superior image quality given by 540 TVL
- ► Keeping the picture bright in fading light When the sun goes down, your picture quality won't! NightSense recognizes fading light and automatically switches to monochrome
- ► Details stay clear when visibility is low AutoBlack enhances picture contrast, counteracting fog, glare or smoke
- ► Installation couldn't be easier Buttons for local set-up, automatic lens detection and Bilinx remote control make installation simple and easy
- ► Easy set up Lens Wizard lets you correctly set the lens without neutral density filters

# **Typical applications:**

- ► City surveillance and public spaces
- ▶ Public transport terminals - train stations / bus stations
- ► Commercial and government buildings
- ► Warehouses (general surveillance)

# Default shutter to capture fast moving objects

Alarm I/O to control

NightSense extends

operational sensitivity

camera modes

Cable compensation for extended distances

XF Dynamic to reveal

details in dark areas



quick back focus

Automatic lens detection

SensUp for improved



AutoBlack to improve contrast

# **Typical applications:**

- ▶ Office space
- ► Airports (indoor, general surveillance)
- ► 'Mantrap'/security tunnel
- ► Service counters e.g. bank tellers
- ► Petrol/gas station
- ▶ Self storage units



# Putting your Dinion camera **to work**







Want to know which type of Dinion fixed-body solution to use in your applications? You'll find just a few ideas on this page.

# **Camera image**

### Warehouse entrance or exit.

Brings out the details with our high sensitivity solutions using smart BLC.

For best color results use Dinion 2X, incorporating 20-bit DSP with WDR sensor.



#### Perimeter fences.

At night or in dark environments, cameras still need to produce clear images. Our Day/Night feature is the answer.

Dinion 2X image enhancements include Day/Night and IR contrast for IR light sources. Also available in our FlexiDome 2X dome system.



# Camera image

# City surveillance and buildings.

Good quality images under artificial lighting situations are critical for security staff and police.

15-bit DinionXF (color) is great in these situations.







Human eye

### Offices and service counters.

Many applications require effective surveillance at an affordable price. In well-lit areas, you can still benefit from Dinion performance and features.

Our mid-range 10-bit Dinion cameras offer you excellent all-round performance while reducing overall system costs.



High quality Dinion camera image

Other cameras



Note: All pictures have been simulated but show typical performance results.

		2X Advanced performance						
	FlexiDome 2X 1/3"	Dinion 2X 1/3"	Dinion 2X 1/2"					
Features								
TVL	540	540	540					
Image processing	20 bit	20 bit	16 bit*					
Dynamic range	120 dB	120 dB	96 dB					
Backlight compensation	Smart	Smart	Smart					
Dual exposure CCD	•	•						
WDR (Wide Dynamic Range)								
2X Dynamic	•	•						
XF Dynamic	•	•	•					
# Operation modes	6	6	6					
True Day/Night	•	•	•					
Default shutter	•	•	•					
Lens Wizard	•	•	•					
AutoBlack	•	•	•					
Auto lens detection	•	•	•					
Privacy zones	•	•	•					
TPG (Test Pattern Generator)	•	•	•					
Bilinx	•	•	•					
3 Year warranty	•	•	•					
Operating temperature	-50 to 55°C / -58 to 131°F	-20 to 55°C / -4 to 131°F	-20 to 55°C / -4 to 131°F					
Dust / water protection	IP66 / NEMA4X							
Impact protection	Exceeds IK10 (> 50 Joules)							

	High performance			Professional performance		
	FlexiDomeXF 1/3"	DinionXF 1/3"	DinionXF 1/2"	FlexiDomeXT+ 1/3"	FlexiDome VF 1/3"	Dinion 1/3"
Features						
TVL	540	540	540	Up to 540	Up to 540	Up to 540
Image processing	15 bit	15 bit	15 bit	10 bit	10 bit	10 bit
Dynamic range	90 dB	90 dB	90 dB	60 dB	60 dB	60 dB
Backlight compensation	Programmable	Programmable	Programmable	Standard	Standard	Standard
WDR (Wide Dynamic Range) XF Dynamic	•	•				
# Operation modes	3	3	3	1	1	1
NightSense	•	•	•	•	•	•
Default shutter	•	•	•			
Lens Wizard	•	•	•	•	•	•
AutoBlack	•	•	•	•	•	•
Auto lens detection	•	•	•	•	•	•
Bilinx	•	•	•	•	•	•
3 Year warranty	•	•	•	•	•	•
Operating temperature	-50 to 50°C -58 to 122°F	-20 to 50°C -4 to 122°F	-20 to 50°C -4 to 122°F	-50 to 50°C -58 to 122°F	-10 to 45°C +14 to 113°F	-20 to 50°C -4 to 122°F
Dust / water protection	IP66 / NEMA4X			IP66 / NEMA4X		
Impact protection	Exceeds IK10 (> 50 Joules)			Exceeds IK10 (> 50 Joules)		

<sup>\*</sup> Maximum performance based on 1/2" CCD

# **Bilinx** – the smartest way to reach your camera

Bilinx is a major time and labor saver, especially when cameras are difficult to reach for hands-on servicing or in environments where you cannot interrupt surveillance. It reduces the number of steps needed in various installation and service situations.

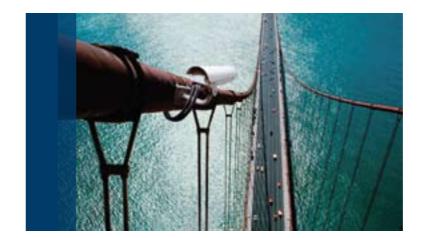
# Remote camera control over the video cable

Bilinx allows you to control any Dinion analog camera – including their FlexiDome counterparts – over the video cable. Embedded in the video signal, this innovative Bosch technology allows you to check camera status, change settings and update firmware from your laptop. It also supports transmission of camera-generated Video Motion Detection, along with signals from connected external sources such as door contacts.

## Stay in control

Bilinx does not require any additional or special wiring; you can use standard coax or passive UTP video cable. Simply attach the Bilinx dongle to the camera, link to your PC or laptop, and you can:

- ► Control PTZ including preset positions
- ► Adjust camera and dome configuration settings
- ► Cut and paste settings to multiple cameras
- ► Receive alarm signals and motion detection



# Benefits at a glance:

- ► Reduce installation and maintenance costs
- ► Plug&Play no need to address each camera
- ► Upgrade existing single cable installations easily
- ► Update camera firmware remotely
- ► Remote set-up



# Total system components

From lenses and mounting brackets to encoders and digital video recorders (DVRs), Bosch gives you a complete range of high quality system components to choose from. Whether adding or upgrading cameras in an existing system or installing a completely new system, Bosch can help you to get the best return on your investment and to save money in the long term.

"The quality remains long after the price is forgotten."
Sir Henry Royce (1863-1930, co-founder of Rolls-Royce Ltd.)



Range of IP network based cameras supporting IVA, ISCSI recording and PoE

#### ▶ VIP encoders

Add network connection and IVA (Intelligent Video Analysis) functionality to analog surveillance systems

### ► AutoDome Modular

A comprehensive range of analog and IP network AutoDomes (PTZ domes) for indoor and outdoor applications

# Extreme CCTV including infrared (IR) and white light sources

#### ► Divar XF and Divar MR

Capture all the details with our top-of-the-line digital embedded recording solutions

#### DiBos

Family of PC based Digital Video Recorder and Transmission Systems

# ► Allegiant

Video switcher/control systems offering full matrix switching capability

#### Bosch VMS

Bosch Video Management System lets you control Bosch CCTV and third party systems using server / client

# Value added tradition

An industry leader in security systems, Bosch sets the standard others try to reach. We take pride in making products that uphold the values of the Bosch tradition.

#### Quality

In Dinion and FlexiDome cameras – as with all Bosch solutions – high quality comes from meticulous design and the most rigorous endurance testing. A thorough development process leaves nothing to chance, ensuring our products give you precise and dependable performance.

#### Innovation

Our commitment to innovation means we participate in shaping market and technology changes. By doing so, we provide our customers with innovative solutions and ensure the dynamic development of our company.

## Reliability

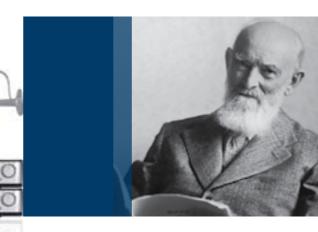
Regardless of the model you choose you can rest assured that it has been manufactured to the highest design

standards – with reliability standards to match! You have the reassurance of a full three year warranty, free advance replacement program and the support of our worldwide service network.

# Sharing with the community

Bosch also puts its values into community action and takes its social responsibility seriously. Since its founding in 1964, the Robert Bosch Stiftung has spent many hundreds of millions of Euros on funding for social programs. It uses various methods to impact on society and its practices, and to trigger development and bring about change.





"It has always been an unbearable thought to me that someone could inspect one of my products and find it inferior in any way. For that reason I have constantly tried to produce products which withstand the closest scrutiny – products which prove themselves superior in every respect..."

Robert Bosch, 1918 (1861-1942, Founder of Robert Bosch GmbH)

# A Tradition of Quality and Innovation

For over 100 years, the Bosch name has stood for quality and reliability. Bosch is the global supplier of choice for innovative technology, backed by the highest standards for service and support.

Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.



# **Bosch Security Systems**

To learn more about our product offering, please visit www.boschsecurity.com or send an e-mail to emea.securitysystems@bosch.com

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