Camera Technologies

Choosing the right combination for your application



GE Security

Features to look for when choosing a camera

Today's surveillance cameras offer a number of advanced technologies to give you higher-quality pictures, plus other features that make them easier to use. These include:

Sensors and Digital Signal Processing

Obtaining a high-quality picture begins at the chip level. Look for a camera that has a high-resolution sensor and Digital Signal Processing (DSP). For improved sensitivity, look for sensors with on-chip microlenses that focus light on each pixel.

Wide dynamic range sensor

Sunlight, car lights, reflections and other lighting factors make it difficult to capture useable images. Wide dynamic range sensor technology, such as GE Security's Xposure, processes pixels individually, providing the widest dynamic range possible in a camera sensor.

Low-light capabilities

Low-light sensors can capture useable surveillance images, even in near-total darkness. These sensors are sensitive to 0.01 lux and can even be used with infrared lighting in environments with no ambient light.

Backlight compensation

Backlight compensation circuitry is an older form of today's wide dynamic range technologies such as Xposure. It helps prevent bright sunlight or reflections from causing important foreground objects to be silhouetted and indistinguishable. At the very least, look for a camera that has backlight compensation, but if possible, choose a camera with Xposure wide dynamic range technology.

Auto-tracking white balance

On color cameras, auto-tracking white balance adjusts to lighting changes to render colors accurately.

High-resolution electronics

Resolution for cameras is measured in lines: the more lines, the sharper the pictures. Choose a black-and-white camera with at least 580 lines of resolution or a color camera with at least 480 lines.

Easy to access controls

A camera with side-mounted controls or one that can be controlled from a remote keypad makes it easier to adjust settings without changing the camera's field of view.

Compatibility with existing infrastructure

A camera that accepts universal power input allows you to connect to a common DC or AC power supply. Video output to coaxial cable, unshielded twisted-pair (UTP) or fiber lets you transmit images using your existing building infrastructure.

Multiple mounting options

Multiple mounting points let you mount a camera from the top or the bottom without modifications. Adapters let you mount cameras from ceilings, walls and other locations.

Multiple video outputs

Multiple video outputs let you hook up a local test monitor during camera setup or connect a camera directly to a monitor without going through a multiplexer or recorder matrix.

Lens options

Standard mount compatibility: A camera that accepts standard C- and CS-mount lenses lets you change lenses without replacing the camera.

Auto iris compatibility: An auto iris lens opens wider to let in more light under low-light conditions; in bright light, it reduces the opening so objects aren't overexposed.

Thumbwheel backfocus: A thumbwheel backfocus makes it easier to adjust the camera so the picture remains sharp throughout the lens' zoom range.

Quick response to your needs

Because GE designs and manufactures its own cameras, the company can respond quickly to customer needs.



GE cameras for all your applications

No matter how many different applications you have, you'll find a GE camera that fits your requirements and budget. Choose from a full range of capabilities and styles among several models in traditional, discreet, covert and dome camera product lines.



Because it's easily recognizable as a camera, the ExpressCam™ provides a deterrent to thieves and vandals. This jewelry store chose a model with EXview technology to capture useable images even when the store is closed and the lights are off.



To cover the loading dock and far side of the warehouse, this company chose a CyberScout™ pan-tilt camera instead of several fixed cameras. The user can operate the pan-tilt manually with a keypad, joystick or computer, or set it up to follow a preset tour.



Because they blend in, discreet cameras not only help maintain the comfortable environment you created, but they often capture more information than conspicuous cameras. This company selected the Ball Camera to complement the modern look of its lobby.



Working with the video switching system, the **CyberDome®** pan-tilt-zoom dome camera can cover all doors in this small warehouse automatically. High zoom enables operators to catch details like text on boxes and license plate numbers.





Sleek and inconspicuous, a dome camera like the MultiView dome helps maintain an attractive environment in this retail environment. This model has four cameras, enabling it to capture four different views of this jewelry store from one vantage point.



This jewelry store and office building use **UltaView** cameras, with **Xposure** wide dynamic range technology, to compensate for harsh backlight conditions. By exposing each pixel individually, Xposure adjusts for bright and dark areas so objects and details are clear.



Because of outdoor lighting extremes, a traditional camera with an auto iris lens, like the CamPlus, is a good choice for monitoring entry and exit from this door. An environmental housing and sun shield protect the camera from heat, cold and moisture.



The innovative PlusPack™ attaches easily to the back of any CamPlus camera. Now you can convert standard coaxial cable video output to unshielded twisted-pair (UTP), fiberoptic, Internet protocol (IP)* or wireless (radio frequency)* video output.



In a large retail facility, the company might install cost-saving Compact Cameras on fixed-camera brackets inside some CyberDome housings. Periodically the company could swap an actual CyberDome camera with the Compact Camera to monitor a problem area.



Because this company had problems with theft of computers and projectors from its board room, it chose a covert Exit Sign Camera to monitor employees' comings and goings. The next time a theft occurs, the company can review their recordings to identify the thief.

*Available soon. Ask your GE security dealer for details.

Cameras come in many shapes and sizes and with varying capabilities. To make a good choice, it helps to understand broad categories of cameras first. At GE, we divide the cameras we offer into four general groupings:

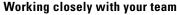
Traditional cameras: These are what usually come to mind when you think of surveillance cameras. Because they're clearly recognizable, they can serve as a visual deterrent to theft or other criminal activity. Traditional cameras are generally used in high-traffic locations such as lobbies, hallways and warehouses. Traditional cameras accept a variety of lenses, making them a versatile choice for many applications.

Discreet cameras: As their name implies, these fixed cameras blend into the background, either because of their small size or design. Use discreet cameras where you don't want conspicuous surveillance.

Covert cameras: These fixed cameras extend the idea behind discreet cameras. They actually look like common objects, such as exit signs, motion sensors and smoke detectors. Businesses often use covert cameras to resolve incidents of recurring theft from an unwatched area, like a break room, or to investigate the activities of a dishonest employee.

Dome cameras: Because dome cameras are housed in a transparent or semitransparent dome, they're less obtrusive than traditional cameras. On mini-dome cameras, the installer can set the camera's position during installation, and can also set the specific field of view with a varifocal lens. Other dome cameras include a pan-tilt unit, which allows you to control the camera's position using a keypad, joystick or computer software.

How to choose a camera that's right for you



Your dealer or system integrator can work with GE to select the best cameras for your applications. In some cases, your project needs may influence future products—customer requirements have inspired many new GE camera designs.



Advanced technology, versatile features for fixed-camera applications



PlusPack

Transmit video signals over your existing infrastructure with the innovative PlusPack attachment. It converts coaxial video output to unshielded twisted-pair (UTP) or fiber-optic.



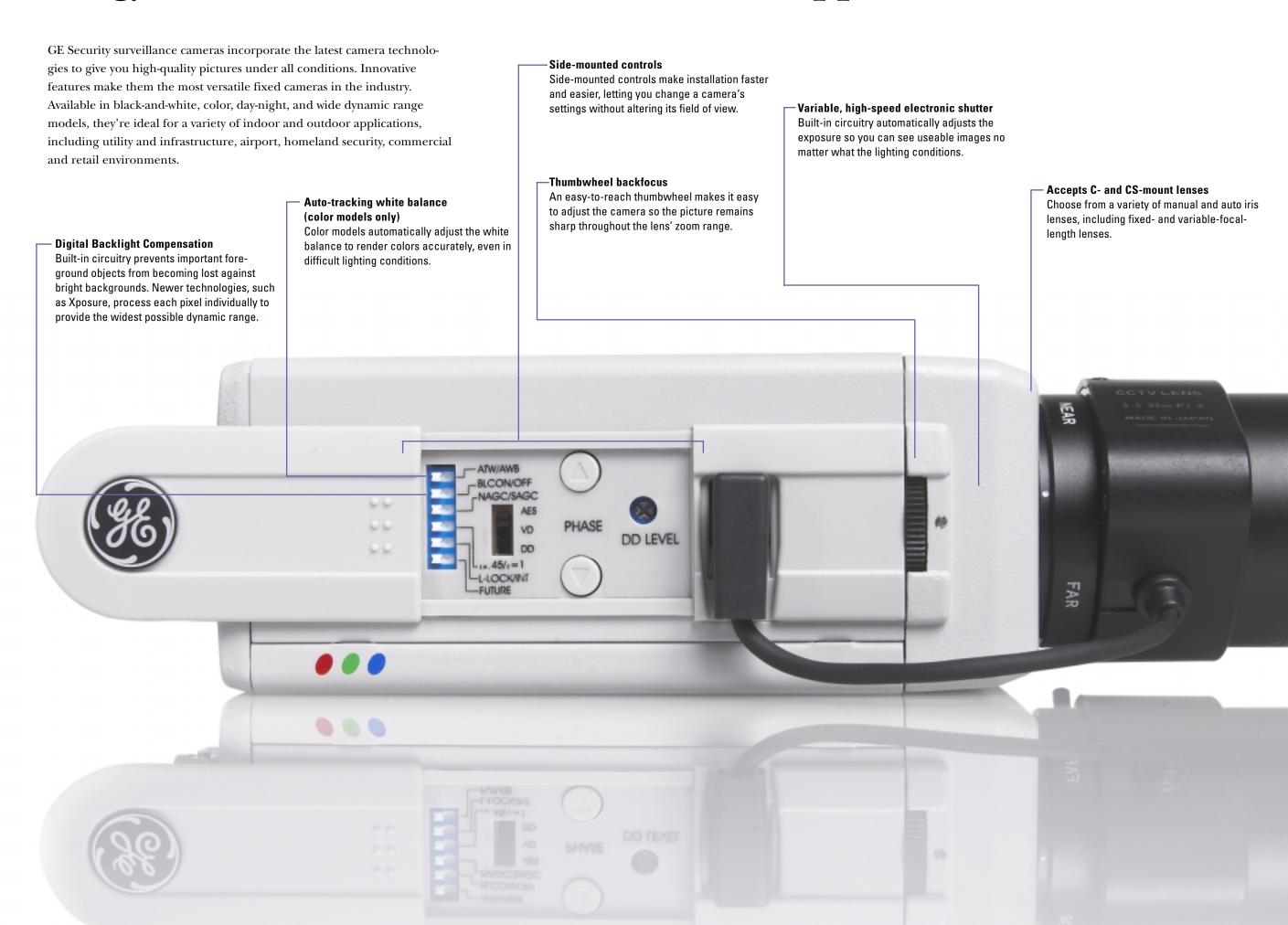
Advanced Sensors and Digital Signal Processing (DSP)

GE camera sensors deliver up to 600 lines of resolution in black-and-white and up to 480 lines in color. An available low-light sensor—sensitive to 0.01 lux in black-and-white and 0.1 lux in color—can capture useable surveillance pictures in near-total darkness. DSP helps keep pictures sharp and clear as lighting conditions change.



Dual video outputs

Dual outputs let you connect to a local video monitor, making installation as well as camera adjustments faster and easier.



GE offers more than cameras

Not only does GE Security offer a wide variety of cameras, we offer a wide variety of all video surveillance products. From monitors and control keypads to digital video recorders and groundbreaking, video-based human detection systems like VideoIQ, GE Security offers everything you need to create a complete video surveillance system.

As with our cameras, we design and build every other line of our security products based on customer needs, and using the latest technology. We were the first top-level manufacturer to include CD-R drives with our digital video recorders, and we were the first to offer up to 1,000 gigabytes of digital storage.

Monitors

GE Security offers a wide range of black-andwhite and color monitors with screen sizes from nine to 21 inches. Flat panel LCD color monitors are available in 15- and 17-inch models. Every monitor features front-panel controls for convenient picture and sound adjustments.

2 Digital recorders

Digital recorders from GE Security work just like a standard security VCR, only better. You'll see sharper, more detailed images, search instantly by date, time, camera or alarm, and never again have to bother with tapes that jam, wear out or need to be stored.

It's this type of innovative and fastresponse design and manufacturing that continues to make GE a top name in the security industry, and we hope it will help you choose GE to meet your video surveillance needs.



Human detection

The VideoIQ human detection system looks at video from your cameras to detect people in areas where they're not supposed to be.

Keypads

You can control your entire video surveillance system—including CyberDomes®, Digiplex® matrix switchers, alarm interfaces, digital recorders and more—with an easy-to-use keypad.

4 Lenses

Choice also extends to fixed camera lenses. GE Security offers a complete range of 1/3 format fixed and variable focal length lenses, both of which are available with a manual iris or auto iris.

5 Fiber transmission

Fiber connectivity gives you multiple benefits over traditional copper cable: sharper pictures over longer distances, no electrical interference and virtually unlimited bandwidth. And only fiber products from GE Security have SMARTS™ technology, featuring on-board diagnostics and real-time system monitoring.





About GE Security

Visit GE on the Web today

You can download product literature for every GE camera—and all our other security products—by visiting us at www.ge-security.com.

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GE Security is a global technology leader dedicated to helping customers protect their people, their property, their customers and their bottom line. We're one of the few companies in the security industry that continues to build its own cameras. And we've been designing and manufacturing video surveillance systems for 25 years. So if you have a need that isn't filled by one of our existing products, we can create a new one.

GE Security is a wholly owned subsidiary of GE. Like our parent company, we maintain a sharp focus on product and service innovation. When we create new technologies, or when we recognize the value of a technology created elsewhere, we begin building them into our cameras. When you choose GE, you can count on having the latest technology to maintain a secure environment.

Our electronic security products fall into three principal categories:

Security and life safety: Fire, intrusion and motion detection equipment, panic buttons and notification appliances like bells, horns and strobes. GE Security is the leading manufacturer of supervised wireless security and life safety systems. Wireless products enable you to install security systems where it is difficult or impossible to run wires for hardwire security. Our Learn Mode® technology

has been a key factor driving the growth of the wireless security market around the world.

Enterprise technologies: Access control, video surveillance, video image storage and retrieval, and fiber-optic audio, data and video transmission. GE Security can integrate all surveillance and access control functionality into a single enterprise-wide system for global companies.

Key management: Products and services for remote site entry, mobile access and information management, and asset tracking and control.

The service you expect

Working with GE Security gives you access to a variety of video surveillance experts, along with security system integrators experienced in all kinds of applications. That means we can respond quickly to your needs.

The security that comes from working with a partner like GE Security

For 110 years, GE has provided reliable products and exceptional service to customers like you, and GE Security continues that tradition. What's more, we offer something that's hard to put a value on: the sense of security that comes from working with one of the most respected companies in the world.

GE Security is a partner you can rely on.



GE Security

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