# IDE10 Series Sarix® IP Indoor Fixed Dome

# 1.3 MEGAPIXEL EXTENDED PLATFORM HIGH DEFINITION DIGITAL CAMERAS

# **Product Features**

- Up to 1.3 Megapixel Resolution (1280 x 1024)
- Up to 30 Images per Second (ips) at 1280 x 720
- Optional CS-Mount Lenses
- · Auto Back Focus for High Precision Focusing
- Easy, Quick, One-Handed Installation
- H.264 and MJPEG Compression
- · Day/Night Capability
- Sensitivity Down to 0.03 lux
- Power over Ethernet (IEEE 802.3af) or 24 VAC
- · Video Setup Jack and Focus Button Accessible with Dome Closed
- · Up to 2 Simultaneous Video Streams
- Built-in Analytics

The **Sarix® IDE10 Series** extended platform (EP) is a 1.3 megapixel (MPx) network indoor fixed dome camera designed with industry-leading image quality and high performance processing power. Designed to install quickly and easily, all of the post back-box installation and setup can be done with one hand.

Sarix technology defines the next generation of video security imaging performance, delivering high definition (HD) resolution, advanced low-light capabilities, consistent color science, and fast processing power. The H.264 compression video files are considerably smaller, making HD video more affordable.

# **Fixed Dome Camera**

The **IDE10 Series** can be ordered with or without lenses.All models include advance low-light technology and a camera in an indoor enclosure that is ready to install. The day/night model has a mechanical IR cut filter for increased sensitivity in low-light installations. These cameras accept a wide range of megapixel varifocal CS-mount lenses.

The **IDE10 Series** supports two simultaneous video streams. The two streams can be compressed in MJPEG and H.264 formats across several resolution configurations. The extended platform gives real-time video (30 ips) with full HD resolution using H.264 compression for optimized bandwidth and storage efficiency. The streams can be configured in a variety of frame rates, bit rates, and group of pictures (GOP) structures for additional bandwidth administration.

# **Built-In Analytics**

**Pelco Analytics** enhance the flexibility and performance of the IDE10 Series camera. Eight Pelco behaviors are preloaded and included as standard features of the IDE10DN models. Pelco behaviors can be



- Local Storage (Micro SD) for Alarm Capture
- Motion Detection
- Audio Accessory Available.

configured and enabled using a standard Web browser, and they are compatible with Endura® or a third-party system that supports Pelco's Analytics API system. Camera models are also available with preloaded **OV Analytic Suites**.

# **Web Interface**

The **IDE10 Series** uses a standard Web browser for powerful remote setup and administration.

## **Window Blanking**

Window blanking is used to conceal user-defined privacy areas that cannot be viewed by an operator. The **IDE10 Series** supports up to four blanked windows. A blanked area will appear on the screen as a solid gray window.

#### **Video Systemization**

The **IDE10 Series** easily connects to Pelco IP and hybrid systems such as Endura version 2.0 (or later) and Digital Sentry® version 4.3 (or later). The camera is also compatible with Digital Sentry NVs (DS NVs), a full-featured video management software, which is available as a free download at <a href="https://www.pelco.com">www.pelco.com</a>. DS NVs includes four free Pelco IP licenses and allows for the management of video from up to 64 cameras.

The **IDE10 Series** features open architecture connectivity to third-party software. Pelco offers an application programming interface (API) for interfacing with Pelco's network cameras.



#### **PELCO ANALYTICS**

The IDE10 Series includes eight user-configurable behaviors. The camera is capable of running up to three behaviors at the same time; although, the number of behaviors is limited to the available processing power of the camera and the type of analytic being used.

**Note:** Available processing power is determined by the settings for compression standards, resolution, image rate, bit rate, and analytic configuration.

For each behavior, you can create several custom profiles that contain different camera settings. With these profiles, you can set up different scenarios for the behavior, which will automatically detect and trigger alarms when specific activity is detected.

Pelco Analytics are configured and enabled using a standard Web browser, and Pelco behaviors are compatible with Endura or a third-party system that supports Pelco's Analytics API system. Multiple Pelco behaviors can be scheduled to work during a certain time or condition. For example, during the day, a camera can be configured with Object Counting to count the number of people that enter a lobby door. At night, the operator can change the profile to Camera Sabotage to trigger an alarm if a camera is moved or obstructed. Available Pelco behaviors include:

- Abandoned Object: Detects objects placed in a defined zone and triggers an alarm if the object remains in the zone longer than the user-defined time allows. An airport terminal is a typical installation for this behavior. This behavior can also detect objects left behind at an ATM, signaling possible card skimming.
- Adaptive Motion: Detects and tracks objects that enter a scene and then triggers an alarm when the objects enter a user-defined zone. This behavior is primarily used in outdoor environments with light traffic to reduce the number of false alarms caused by environmental changes.
- Camera Sabotage: Detects contrast changes in the field of view. An alarm is triggered if the lens is obstructed with spray paint, a cloth, or a lens cap. Any unauthorized repositioning of the camera also triggers an alarm.
- Directional Motion: Generates an alarm in a high traffic area when a
  person or object moves in a specified direction. Typical installations for
  this behavior include an airport gate or tunnel where cameras can detect
  objects moving in the opposite direction of the normal flow of traffic or an
  individual entering through an exit door.
- Loitering Detection: Identifies when people or vehicles remain in a
  defined zone longer than the user-defined time allows. This behavior is
  effective in real-time notification of suspicious behavior around ATMs,
  stairwells, and school grounds.
- Object Counting: Counts the number of objects that enter a defined zone
  or cross a tripwire. This behavior might be used to count the number of
  people at a store entrance/exit or inside a store where the traffic is light.
  This behavior is based on tracking and does not count people in a
  crowded setting.
- Object Removal: Triggers an alarm if an object is removed from a
  defined zone. This behavior is ideal for customers who want to detect the
  removal of high value objects, such as a painting from a wall or a statue
  from a pedestal.
- Stopped Vehicle: Detects vehicles stopped near a sensitive area longer than the user-defined time allows. This behavior is ideal for airport curbside drop-offs, parking enforcement, suspicious parking, traffic lane breakdowns, and vehicles waiting at gates.

## **OBJECTVIDEO (OV) ANALYTIC SUITES**

ObjectVideo Analytics Suites are preloaded on selected IDE10 Series cameras and require an OV Ready system to configure the behaviors for alarm notification.

# **OV Security Suite**

The OV Security Suite is easy to use and includes Tripwire Detection, Inside Area Detection, and Camera Tamper Detection behaviors.

- Tripwire Detection identifies objects that cross a user-defined line drawn within the camera's field of view.
- Inside Area Detection identifies objects entering, appearing, or moving within a user-defined area.
- Camera Tamper Detection identifies significant contrast changes in the camera's field of view; for example, if the lens is obstructed by spray paint, a cloth, or a lens cap.

## **OV Security Suite Plus**

The OV Security Suite Plus includes the behaviors of the OV Security Suite plus Multi-Line Tripwire Detection, Loitering Detection, and Leave Behind Detection behaviors.

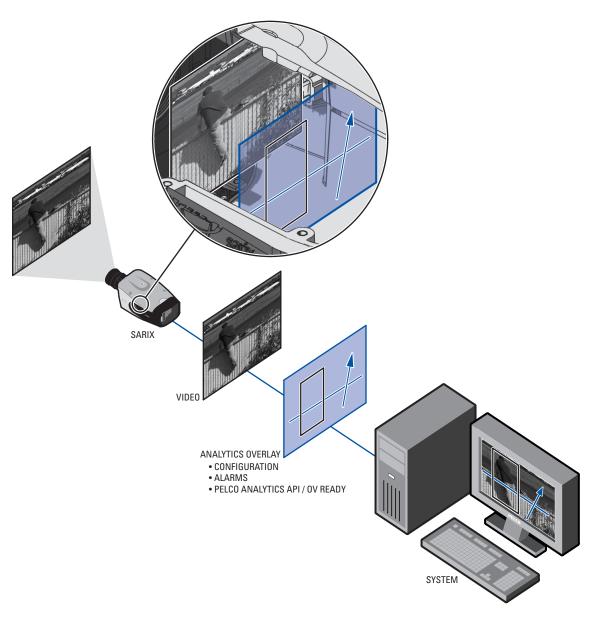
- Multi-Line Tripwire Detection identifies objects that cross two defined lines and generates an event based on defined parameters, including directionality. Defined parameters for this behavior include direction, sequential order, and time between crossing each tripwire.
- Loitering Detection identifies when people or vehicles remain within a user-defined area beyond a specified period of time. This behavior is effective for real-time notification of suspicious behavior around ATMs, stairwells, and school grounds.
- Leave Behind Detection detects objects placed in a defined zone and triggers an alarm if the object remains in the zone longer than the user-defined time allows.

## **OV Event Counting Suite**

The OV Event Counting Suite uses advanced object calibration and additional features for schedules, parameters, and multiple rules. The suite includes behaviors for Tripwire Counting, Enters/Exits Counting, Loiter Counting, Occupancy Sensing, and Dwell-Time Monitoring.

- Tripwire Counting counts people or objects that cross a user-defined line.
- Enters/Exits Counting calculates the number of people that enter and exit an area without using a tripwire.
- Loiter Counting is useful in analyzing how frequently people stop in front
  of a product, display, or other area of interest. This feature is also useful
  in assessing promotion effectiveness and product interest.
- Occupancy Sensing counts people and generates a new value every time the occupancy level changes. Since each occupancy output is time-stamped, the data can be used to determine average occupancy levels or to correlate data to point-of-sale or other business scenarios.
- Dwell-Time Monitoring rules can be set up to record the length of time it takes an object to enter and exit an area. Along with queue size information, wait times can also be assessed. This behavior can be used to evaluate consumer interaction for a point-of-sale display or digital advertisement.

The following diagram illustrates how the camera system interprets streaming video when embedded analytics are configured and enabled.



**IMPORTANT NOTE: PLEASE READ.** The network implementation is shown as a general representation only and is not intended to show a detailed network topology. Your actual network will differ, requiring changes or perhaps additional network equipment to accommodate the system as illustrated. Please contact your local Pelco Representative to discuss your specific requirements

#### **GENERAL**

Imaging Device 1/3-inch (effective)

Imager Type **CMOS** 

Imager Readout Progressive scan Maximum Resolution 1280 x 1024 50 dB Signal-to-Noise Ratio Auto Iris Lens Type DC drive

**Electronic Shutter Range** 1 ~ 1/100,000 sec

Wide Dynamic Range 60 dB

White Balance Range 2,000° to 10,000°K Sensitivity f/1.2; 2,850°K; SNR >24 dB

Color (1x/33 ms) 0.5 lux Color SENS (15x/500 ms) 0.12 lux Mono (1x/33 ms) 0.25 lux Mono SENS (15x/500 ms) 0.03 lux

Dome Attenuation

Clear Zero light loss Smoked f/1.0 light loss

Construction

Back Box Cast aluminum Trim Ring Polycarbonate plastic Bubble Acrylic plastic Finish White

Weight (without lens)

0.9 kg (2.0 lb) Unit 2.7 kg (6.0 lb) Shipping

Chinese, English, French, German, Italian, Available Languages

Portuguese, Russian, Spanish, and Turkish

#### **ELECTRICAL**

RJ-45 connector for 100Base-TX Port

Auto MDI/MDI-X

Cable Type Cat5 or better for 100Base-TX

Power Input 18 to 34 VAC; 24 VAC nominal or PoE (IEEE

802.3af class 3)

Power Consumption <6 W

**Current Consumption** 

<200 mA maximum PoE

24 VAC <295 mA nominal; <390 mA maximum

Local Storage

Alarm Input 10 VDC maximum, 5 mA maximum Alarm Output 0 to 15 VDC maximum, 75 mA maximum External 3-connector, 2.5 mm provides Service Port

NTSC/PAL video output

Accessory Port Connects Pelco accessories

#### **MECHANICAL**

Lens Mount CS mount, adjustable

Pan/Tilt Adjustment

Pan

160° (10° to 170°) Tilt

Rotate 355°

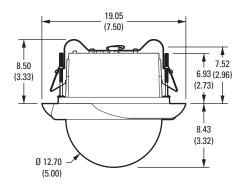
# **ENVIRONMENTAL**

Operational Temperature 0° to 50°C (32° to 122°F) Operational Humidity 20% to 80%, noncondensing



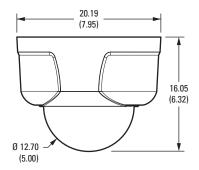
NOTE: VALUES IN PARENTHESES ARE INCHES; ALL OTHERS ARE CENTIMETERS.

#### IN-CEILING



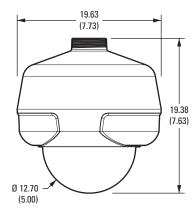
# SURFACE MOUNT

(Mounting Ring Included)



#### PENDANT

(Mount Available as Accessory)



#### **VIDEO**

Video Encoding H.264 Base profile and MJPEG

Video Streams Up to 2 simultaneous streams; the second

stream is variable based on the setup of the

primary stream

Frame Rate Up to 30, 25, 24, 15, 12.5, 12, 10, 8, 7. 5, 6, 5,

4, 3, 2, 1 (dependent upon coding, resolution,

and stream configuration)

Available Resolutions

Resolution				MJPEG		H.264 Base Profile	
MPx	Width	Height	Aspect Ratio	Maximum IPS	Recommended Bit Rate	Maximum IPS	Recommended Bit Rate
1.3	1280	1024	5:4	20.0 ips	10.0 Mbps	20.0 ips	3.4 Mbps
1.2	1280	960	4:3	20.0 ips	9.8 Mbps	20.0 ips	3.0 Mbps
0.9	1280	720	16:9	30.0 ips	10.0 Mbps	30.0 ips	2.9 Mbps
0.5	800	600	4:3	30.0 ips	7.7 Mbps	30.0 ips	2.0 Mbps
0.3	640	480	4:3	30.0 ips	4.9 Mbps	30.0 ips	1.5 Mbps
0.1	320	240	4:3	30.0 ips	1.2 Mbps	30.0 ips	0.5 Mbps

Additional Resolutions 640 x 512, 640 x 352, 480 x 368, 480 x 272,

320 x 256, and 320 x 176

Supported Protocols TCP/IP, UDP/IP (Unicast, Multicast IGMP),

UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP (client), SSH, SSL, SMTP, FTP, and

802.1x (EAP)

Users

Unicast Up to 20 simultaneous users depending on

resolution settings (2 guaranteed streams)

Multicast Unlimited users H.264
Security Access Password protected

Software Interface Web browser view and setup
Pelco System Integration Endura 2.0 (or later) or
Digital Sentry 4.3 (or later)

Open IP Integration Pelco IP camera API

Minimum System Requirements

Processor Intel® Core® 2 Duo microprocessor, 2.6 GHz
Operating System Microsoft® Windows® XP, Windows Vista®,

or Mac® OS X 10.4 (or later)

Memory 2 GB RAM

Network Interface Card 100 megabits (or greater)

Monitor Minimum of 1024 x 768 resolution, 16- or

32-bit pixel color resolution

Web Browser\* Internet Explorer® 7.0 (or later) or Mozilla®

Firefox® 3.5 (or later); Internet Explorer® 8.0 (or later) is recommended for configuring

analytics

Media Player or QuickTime® 7.6.5 for

Windows XP, Windows Vista, or QuickTime

7.6.4 for Mac OS X 10.4

#### **ANALYTICS**

Required Systems for Pelco Analytics

Pelco Interface WS5200 Advanced System Management Software on an Endura 2.0 (or later) system Open API Pelco analytics allow streaming information

Pelco analytics allow streaming information to communicate though Pelco's API Guide for Video Analytics version 0.55.30 (or later),

available at Pelco.com/IP

Required System for

Object Video Suites OV ready-compliant system with OV Ready

video management system

<sup>\*</sup>Internet Explorer is not supported by Mac OS X 10.4.

<sup>&</sup>lt;sup>†</sup>This product is not compatible with QuickTime version 7.6.4 for Windows XP or Windows Vista. If you have this version installed on your PC, you will need to upgrade to QuickTime version 7.6.5.

#### **MODELS**

IDE10DN-0 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, no lens, smoked dome, with built-in Pelco

analytics

IDE10DN-1 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, no lens, clear dome, with built-in Pelco analytics

IDE10DN8-1 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, 2.8 ~ 8 mm varifocal megapixel lens, clear dome, with built-in Pelco analytics

IDE10DN-0CP1 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, no lens, clear dome, with built-in OV Event

Counting Plus Suite

IDE10DN-0S1 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, no lens, clear dome, with built-in OV Security

Suite

IDE10DN-0SP1 Sarix indoor fixed dome network camera,

extended platform, 1.3 MPx, day/night, no lens, clear dome, with built-in OV Security

Plus Suite

# **CERTIFICATIONS/RATINGS/PATENTS**

• CE. Class B

- FCC, Class B
- UL/cUL Listed
- · C-Tick
- Patents Pending

# **OPTIONAL ACCESSORIES**

IX-SC Service/monitor cable, 1.22 cm (4 ft);

compatible with standard BNC connectors

AUD-1 External audio accessory
ALM-1 External alarm accessory
POE20U560G Single port PoE injector

## **RECOMMENDED MOUNTS**

ID-P Pendant mount
ID-DF5 DF5 Series adapter kit

ID-CB Conduit box for in-ceiling installations
ID-PCB 61 x 61 cm (2 x 2 ft) ceiling panel with conduit

box

SWM-WT Wall mount for pendant
SWM-CAWT Corner adapter for wall mount
SWM-PAWT Pole adapter for wall mount

#### **RECOMMENDED LENSES**

13M2.2-6 Megapixel lens, varifocal, 2.2  $\sim$  6.0 mm, f/1.3  $\sim$  2.0
13M2.8-8 Megapixel lens, varifocal, 2.8  $\sim$  8.0 mm, f/1.2  $\sim$  1.9
13M2.8-12 Megapixel lens, varifocal, 2.8  $\sim$  12.0 mm, f/1.4  $\sim$  2.7
13M15-50 Megapixel lens, varifocal, 15.0  $\sim$  50.0 mm, f/1.5  $\sim$  2.1

Pelco megapixel lenses have been designed and tested to deliver optimal image quality for the IDE10 Series dome. The use of standard definition lenses on IDE10 Series megapixel cameras will limit the resolution of the camera, creating poor image quality.

1	of View grees	High Resolution Streams (>800 x 600) Aspect Ratio				
		16:9	4:3	5:4		
2.2 mm	Horizontal	109	109	109		
2.2 111111	Vertical	63	83	89		
2.8 mm	Horizontal	89	89	89		
2.8 111111	Vertical	48	66	70		
6.0 mm	Horizontal	42	42	42		
0.0 111111	Vertical	24	32	34		
0.0 mm	Horizontal	32	32	32		
8.0 mm	Vertical	18	24	25		
12.0 mm	Horizontal	21	21	21		
12.0 111111	Vertical	12	16	17		
15.0 mm	Horizontal	16	16	16		
10.0 11111	Vertical	9	12	13		
E0.0 mm	Horizontal	5	5	5		
50.0 mm	Vertical	3	4	4		

**Note:** For 800 x 600 (or lower) resolutions in 4:3 or 5:4 aspect ratios, the field of view is smaller than listed above. Refer to the Installation/Operation manual for details.