WS5080 Endura® Workstation

WITH WS5200 ADVANCED SYSTEM MANAGEMENT SOFTWARE

Product Features

- Provides Full Access to Operations and Administration Through User-Friendly Graphical User Interface
- Microsoft® Windows® 7 Ultimate 64-Bit Operating System
- Highly Intuitive Graphical User Interface Optimized for Surveillance Professionals
- Optional Endura Mapping Interface Provides Editing and Alarm Monitoring/Management Tools
- Support for Standard and Megapixel Resolution Cameras
- Support for MPEG-4, H.264 Baseline, Main, and High-Profile Codecs
- Audio Streaming and Playback
- Zone of Interest[™] Allows Independent View and Management of Specified Areas Within a Camera's Field of View in Live or Playback Views
- Synchronized Playback of Multiple Cameras
- Digital Zoom in Live or Playback Views
- Convenient Tear-off Options to Customize Display
- Maintains Camera's Native Aspect Ratio While Supporting 4:3 or 16:9 Aspect Ratio Monitors and a Mix of SD or Megapixel Video Content
- Capable of Up to 16 Simultaneous 4SIF/CIF Resolution, 30/25 Frames per Second (fps) MPEG-4 Decode, 12 H.264 4SIF/CIF Resolution, 30/25 fps H.264 Baseline Decode, or 2 Full 1080p

The **Endura® workstation** is a high-end personal computer running Windows® 7 Ultimate that is optimized for the **WS5200** advanced system management software. The **Endura workstation** can decode and display up to 16 video streams simultaneously and can process up to 30/25 (NTSC/PAL) images at 4CIF resolution per second, per stream. The **Endura workstation** includes the **WS5200** software package.

The **WS5200** software provides access to all operation and configuration features of the Endura system in a unified, intuitive, graphical user interface. The interface has been optimized for the demanding needs of surveillance professionals and utilizes dragand-drop operations, shortcut menus, built-in tooltips, and online Help to enable the most direct, intuitive interactions with cameras and components distributed across the network.





- EnduraView[™] Technology Mitigates CPU Processing Requirements and Network Bandwidth Consumption for Multiscreen Configurations
- Integrated Configuration and Administration Interface Provides Full Management Capability for all Components
- Powerful Scripting Engine to Automate Virtual Matrix Functionality Across a Built-in Monitor Wall Capability
- On-Screen Pan/Tilt/Zoom (PTZ) Controls Including Click to Center and PTZ to Selected Area
- Camera Call Up and PTZ Control from KBD5000
- Advanced Search Capabilities Including Motion, Alarm, Event, and Camera
- Integrated Event and Alarm Monitoring and Management Interface
- User-Specific Choice of Language, Rights and Permissions, and Screen Configurations
- Export Video and Still Images in Multiple Formats Including PEF, QuickTime®, MPEG-4, AVI, PNG, BMP, and JPG

Video Display Optimized for Surveillance

Surveillance operators require access to real-time live video and instant access to playback. The **W\$5200** has been specifically designed to optimize performance, productivity, and effectiveness. Operators can customize up to six active workspaces. Each workspace can have its own screen configuration populated with any grouping of cameras. These workspaces allow the operator to rapidly switch from camera group to camera group. The workspaces and camera associations are automatically loaded upon logon, along with the user's language preferences and permission levels. This eliminates any lost time in changing screen layouts or configurations during shift changes.





TECHNICAL SPECIFICATIONS

The second generation of the WS5200 has also been designed to deliver optimum decoding performance to take advantage of the latest capabilities of analog cameras and advances in compression technology. The WS5200 supports MPEG-4 as well as all common profiles of the latest H.264 codec. Provided the host PC has enough processing power, users can simultaneously decode sixteen 4CIF, MPEG-4 video streams in real time, or twelve H.264 Baseline profile streams in real time, or two 1080p streams in real time. Of course, any combination is also supported. Additionally, more cameras can be viewed simultaneously using the WS5200's convenient tear-off tabs and leveraging multiple monitors to display more content. Endura's patent-pending EnduraView[™] technology will manage the CPU processing load and network bandwidth requirements by automatically seeking out and displaying a lower resolution, secondary stream (if one exists), or reducing the refresh rate to ensure that system stabilization is not jeopardized.

To take advantage of the latest developments in monitor technology and camera capabilities, the WS5200 interface automatically detects the monitor's native resolution and aspect ratio and configures the display to accommodate what the monitor can support. Based on the monitor's native aspect ratio, the WS5200 supports screen configurations in single-image, 2×2 , 3×3 , 4×4 , 1 + 5, 1 + 12, and 2+8 for 4:3 aspect ratio displays and adds 3 x 2 and 4 x 3 for 16:9 aspect ratio displays. As different cameras operate in different aspect ratios, the WS5200 will maintain the native aspect ratio of the camera to minimize any potential distortion of the image. An innovative Zone of Interest™ feature makes it convenient to leverage the power of today's megapixel cameras to cover a large field of view while allowing a user to independently select certain areas of the scene to get a closer view. The WS5000's zone of interest capability consumes no additional processing power or network bandwidth as a user creates up to six independently controlled zones of interest from a single camera.

Recorded footage can be instantly accessed for any camera without impacting the ability to maintain live surveillance over other cameras on the same monitor. Flexible synchronous playback allows operators to synchronize the playback of 16 cameras for investigations that require multiple vantage points of the same event. Additionally, the **WS5200** allows users to review recorded footage from any camera while simultaneously viewing the live stream from that camera on the same monitor. Camera controls, PTZ operation, video playback controls, snapshot capture, and export tools all conveniently appear over the video when the cursor is placed on the desired camera's view.

Fully Integrated Administration and Management

In addition to access to live and recorded video, the **W\$5200** also serves as an administration and management console for the Endura system. With proper user credentials, administrative users can easily configure all devices and users on the system. Camera, encoder, recorder, and decoder hardware and software parameters can be accessed and managed from the administrative screens. Software patches and updates can easily be pushed out to select or multiple devices from the same console. User passwords, preferences, and credentials can be centrally managed from one **W\$5200**.

All diagnostic messages from every component on the Endura network are available to any user and any viewing device. With proper credentials, administrators can easily configure all users and devices on the system. User actions and system messages are continuously logged and available for audit trail purposes.

Integrated Alarm Management Engine

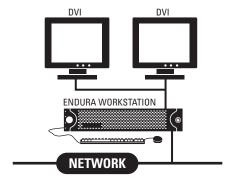
The **WS5200** has a built-in alarm management engine. System alarms, motion, and video analytics alarms are displayed in a dedicated alarm workspace. As the alarm is generated, indicators display the type of alarm, the priority level of the alarm, and the current state of the alarm. Users can simply select the alarm and visually verify its cause before determining whether to acknowledge or snooze the alarm. Comments and instructions inserted by an administrator serve to provide more detail about the alarm or to instruct the operator about the next actions taken. Operators can also add their own comments to be logged with the associated alarm.

Extensible Architecture

The **WS5200** provides built-in support for monitor wall configuration and operation. Using NET5402R-HD network video decoders or VCD5202 virtual consoles, operators can maneuver and control video on any network monitor through the **WS5200** interface or the VCD5202 interface.

The **WS5200** offers an optional interface to Endura Mapping. The mapping extension adds editing and map construction tools while providing for a convenient way to monitor the entire facility for alarms. Multiple layers can be turned on and off to provide access to key devices. In addition, multiple maps can be hyperlinked together to provide for easy navigation between map views.

As a fully integrated component of the **W\$5200**, the mapping interface provides a convenient visual verification from a pop-up view. In addition to access to recorded and live video from the pop-up, operators can acknowledge or snooze the alarm, manually execute relays and scripts as a response to the alarm, capture a snapshot, or direct the associated camera onto the Endura monitor wall for further analysis and action.



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.

TECHNICAL SPECIFICATIONS

WORKSTATION HARDWARE SPECIFICATIONS

Processor Intel® Xeon® E3-1275 v3
Internal Memory 8 GB DDR3 RAM ECC

Operating System Windows 7 Ultimate 64-bit SP1

User Interface Graphical User Interface, WS5200 version 2.x, advanced system management software

Internal Storage

SSD 120 GB
Drive Bays 4 (3 unused)
Optical Drive DVD±RW

USB Ports 3 USB 2.0 ports (1 front, 2 rear)

2 USB 3.0 ports (rear)

VIDEO

Video System Intel HD Graphics P4700 (shared memory)

Max Resolution 3840 x 2160 per DisplayPort output (2x)
1920 x 1200 at 60 hz on DVI-D output
1920 x 1200 at 60 hz on VGA output

Video Outputs Supports up to 3 simultaneous displays using

any combination of the four outputs

Video Standards 60 Hz capable for NTSC

75 Hz capable for PAL

Video Decoding Supported MPEG-4 ASP; H.264 Baseline, Main, and High

profiles

Video Display Modes 1 image, 4 images (2 x 2), 9 images (3 x 3),

16 images (4 x 4), 6 images (1 large + 5 small), 10 images (2 large + 8 small), 13 images

(1 large + 12 small);

High definition monitors can also display 6 images (3 x 2) and 12 images (4 x 3)

Decoding Performance 16X real-time MPEG-4 streams at 704 x 480;

12X real-time H.264 Baseline profile streams

at 704 x 480;

4X H.264 Baseline profile streams at 720p; 2X real-time H.264 Baseline profile streams

at 1080p

AUDIO

Audio Decoding G.711 speech codec

Audio Bit-rate 64 kbps

Audio Levels

Input Electret microphone

Output Up to 3 Vp-p, adjustable, minimum load of

8 ohms

Audio Connectors 2, 3.5 mm stereo jacks
Connector Tip Signal left (input and output)
Connector Ring Signal right (input and output)

Connector Sleeve Common
Audio Inputs Microphone
Audio Outputs Speaker or line out

NETWORK

Interface 2 Gigabit Ethernet RJ-45 port (1000Base-T)

FRONT PANEL

Buttons Power, configuration/reset

Indicators

Unit Status Green, amber, red Primary Network Green, amber, red Secondary Network Green, amber, red

Software Status Green, amber, red (based on diagnostics)

Hard Disk Status Green, red, off (behind bezel)

POWER

Power Input 100 to 240 VAC, 50/60 Hz, autoranging

Power Supply Internal

Power Consumption Operating Maximum
100 VAC 160 W, 1.60 A, 547 BTU/H
115 VAC 160 W, 1.39 A, 547 BTU/H
220 VAC 160 W, 0.72 A, 547 BTU/H

ENVIRONMENTAL

Operating Temperature 10° to 35°C (50° to 95°F) at unit air intake

(front of unit)

Storage Temperature -40° to 65°C (-40° to 149°F)
Operating Humidity 20% to 80%, noncondensing

Maximum Humidity Gradient 10% per hour

Operating Altitude —15 to 3,048 m (—50 to 10,000 ft)

Operating Vibration 0.25 G at 3 Hz to 200 Hz at a sweep rate of

0.5 octave/minute

Note: The temperature at the unit air intake can be significantly higher than room temperature. Temperature is affected by rack configuration, floor layout, air conditioning strategy, and other issues. To prevent performance failure and unit damage, make sure the temperature at the unit is continuously within the operating temperature range.

PHYSICAL

Construction Steel cabinet

Finish

Front panel Gray metallic with black end caps

Chassis Black matte finish

Dimensions 50.8 x 43.4 x 8.9 cm
(20" D x 17.1" W x 3.5" H)

Mounting Desktop (feet) or rack (2 RU per unit)

Unit Weight 13.06 kg (28.8 lb)

TECHNICAL SPECIFICATIONS

MODELS

Use the following table to create a model number for your WS5080. For example, the model number for a unit with a United Kingdom power cord would be WS5080-UK.

Model	Country Code	Description
WS5080	US = North America AU = Australia AR = Argentina EU = Europe UK = United Kingdom	Endura Workstation with WS5200 version 2.x advanced system management software package (WS5200-1) and regional power cord
	CN = China	Endura Workstation with WS5200 version 2.x advanced system management software package (WS5200-1) and no power cord

SUPPLIED ACCESSORIES

Keyboard

Mouse

DisplayPort to DVI Adapter

USB drive containing resource and recovery information

Windows 7 Ultimate Disc with License

Rack Mount Kit

Power Cord

Note: Units shipped to China do not include power cords.

OPTIONAL SOFTWARE ACCESSORIES

WS5200-MAP

Endura Mapping interface

CERTIFICATIONS

- CE, Class A
- FCC, Class A
- UL/cUL Listed
- · S-Mark for Argentina
- CCC
- · C-Tick

STANDARDS/ORGANIZATIONS

- Pelco is a member of the MPEG-4 Industry Forum
- · Pelco is a member of the Universal Plug and Play (UPnP) Forum, Steering Committee
- Pelco is a member of the Universal Serial Bus (USB) Implementers Forum
- Pelco is a contributor to the International Standards for Organization / Electrotechnical Commission (ISO/IEC) Joint Technical Committee 1 (JTC1), "Information Technology," Subcommittee 29, Working Group 11

 Compliance, ISO/IEC 14496 standard (also known as MPEG-4)
- Compliance, International Telecommunication Union (ITU) Recommendation G.711, "Pulse Code Modulation (PCM) of Voice Frequencies"