

VideoXpert Enhanced Core Media Gateway™

Product Features

- Provides scalability and modular expansion
- Ideal for systems requiring enhanced performance, redundancy, and bandwidth; maximum support for up to 7500 cameras per CMG depending on configuration
- Supports MJPEG, MPEG-4, H.264, and H.265
- Supports environments that use anti-virus and firewall software
- Supports ONVIF-compliant cameras and devices
- Supports DNS hostnames for ONVIF-compliant cameras and Pelco cameras
- Enables and supports Risk Management Framework (RMF) and FIPS 140-3



VideoXpert Core™

VideoXpert Core™ is the heart of the VideoXpert System™, it maintains the database of cameras, recording devices, users, and permissions. Core works with VxToolbox, from which you can configure and manage the system. Through VxToolbox, you can administer user accounts and permissions, determining the system functions and devices users can access. You can create and assign “tags” to quickly organize cameras and devices within the system. You can also configure and respond to events within the system.

VideoXpert Media Gateway™

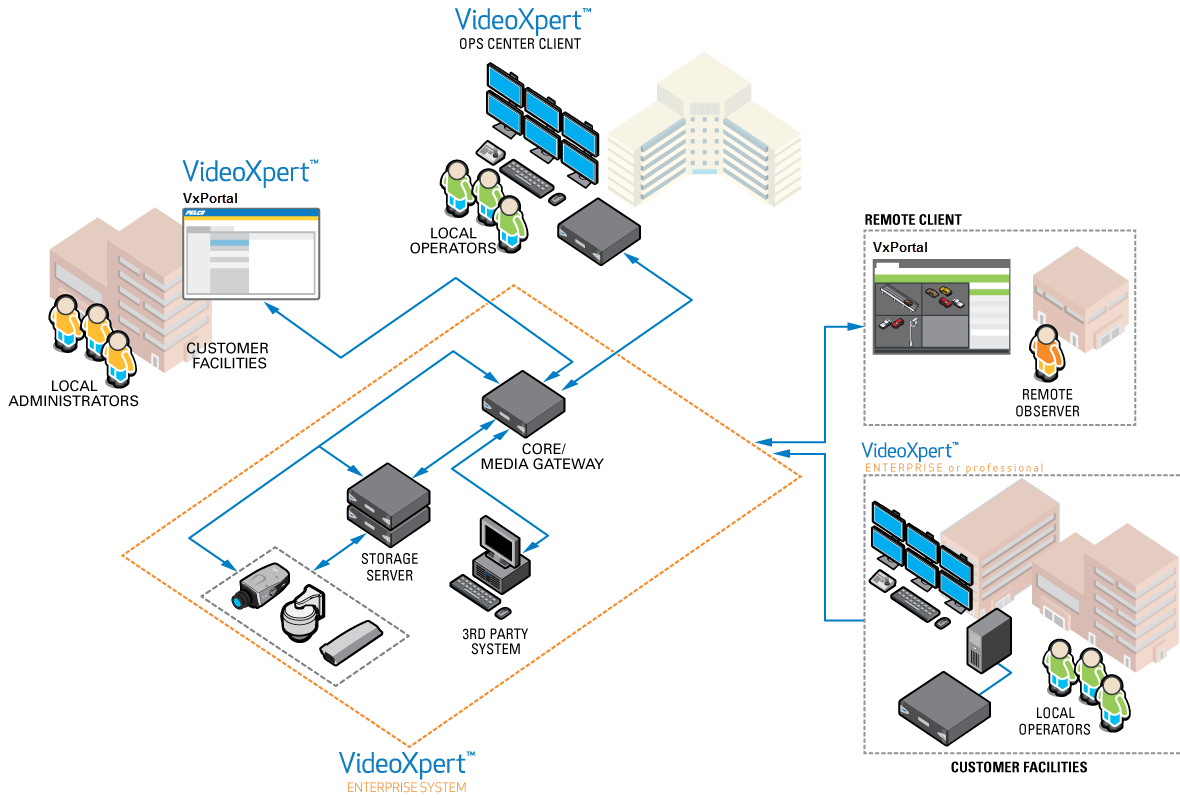
The VideoXpert Media Gateway™ routes video traffic to appropriate users as requested. The Media Gateway:

- Routes the video to the workstation in a multicast environment
- Accesses the video in a unicast environment
- Transcodes the video for low-bandwidth connected VxOpsCenter clients

Like Core servers, Media Gateways can be added to VideoXpert modularly. You can add Media Gateways to the system as the media delivery needs increase.

System Topology When Using VideoXpert Aggregation™

VideoXpert Enterprise™ with Aggregation™ allows for expansion at any level of your security environment. Your system begins with a single server running Core and Media Gateway software. Your system can use dedicated VxOpsCenter Clients to view live and recorded video, or it can use VxPortal™, which fully utilizes HTML5 browser technology to deliver a similarly rich experience with no client software required. As your surveillance needs grow, you can add servers to expand modularly within a single environment, or you can aggregate multiple VideoXpert Enterprise systems to provide a single point of access for distributed video management networks.



Technical Specifications

Hardware

Item	Description
Processor	Intel® Xeon® Silver 4210
Memory	64 GB DDR4 ECC
Operating System	Microsoft® Windows® Server 2019
SSD Storage	960 GB
USB Ports	
USB 2.0	2x front
USB 3.0	2x rear

Video

Item	Description
Video system	Matrox G200eR2 Graphics
Memory	Shared
Video Outputs	VGA
Maximum Resolution	1440 x 900 at 60 Hz

Networking

Item	Description
Interface	1 GbE Network ports (2x), 10 GbE SFP+ ports (2x), dedicated iDRAC port
IP version	IPv4 and IPv6

Front Panel

Item	Description
Buttons	Power
Indicators	
Unit Status	Blue, amber, off
Primary Network	Green, amber, off
Secondary Network	Green, amber, off
Hard Disk Status	Green, amber, off (behind bezel)
Power Status	Green, off
Power Fail Status	Amber, off

Power

Item	Description
Power Input	100 to 240 VAC 50/60 Hz ±5%, autoranging
Power Supply	Dual hot-swappable, redundant power supply (1+1), 550 W
Power Consumption	
100 VAC	163 W, 1.5 A, 556 BTU/H
220 VAC	161 W, 0.7 A, 549 BTU/H

Environmental

Item	Description
Operating Temperature	10° to 35°C (50° to 95°F) with no direct sunlight on the equipment
Non-Operating Temperature	−40° to 65°C (−40° to 149°F)
Operating Relative Humidity	10% to 80% relative humidity with 29°C (84.2°F) maximum dew point, non-condensing
Non-Operating Relative Humidity	5% to 95% relative humidity with 33°C (91°F) maximum dew point, non-condensing
Operating Altitude	3,048 m (10,000 ft)
Operating Vibration	0.26 G at 5 Hz to 350 Hz (all operation orientations)



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

Item	Description
Construction	Steel and plastic cabinet
Finish	
Front Panel	Black with metallic silver
Chassis	Silver
Dimensions (D x W x H)	65.73 x 43.4 x 4.28 cm (25.87 x 17.08 x 1.68 in) without rack ears and bezel
Mounting (RU)	1 RU
Unit Weight	17.5 kg (38.6 lb)

Certifications

Item	Description
CE	Class A
FCC, Part 15	Class A

Item	Description
ICES-003	Class A
BIS	✓
UL/cUL Listed	✓
RCM	✓
CCC	✓
KC	✓
NOM	✓

Minimum System Requirements for Software-only Installation¹

Item	Description
Processor	Intel i7
Memory	16 GB
Operating System	Microsoft® Windows® Server 2012 or 2016
Video System	Intel HD Graphics P4700
Interface	Gigabit Ethernet (1000Base-T)

¹Tested without anti-virus software installed.

Security

VideoXpert includes the following security features:

- Client authentication
- Passwords stored with cryptographic protection
- Configurable roles and permissions
- User action reports
- TLS-based encryption over HTTPS
- Support running with antivirus
- Ability to encrypt exports
- Synchronized system clocks using NTP
- Supports video and data encryption using AES-128-256 through third-party disk encryption software.
- Incorporates FIPS 140-3 validated cryptographic modules

- FISMA/NIST Configuration Guidance – This guide will help organizations documenting the system through their RMF process with information about:
 - How to categorize the system
 - Which NIST-based security controls are applicable
 - How VX implements NIST-based security controls
- FISMA/NIST Compliance Testing – VideoXpert is installed on a FISMA representative system with applicable DISA STIGs (Defense Information Systems Agency, Secure Technical Implementation Guidelines) and tested for functionality. Applicable STIGS include:
 - Microsoft Windows 10 for VxOpsCenter and VxToolbox
 - Microsoft .Net Framework 4
 - Microsoft Internet Explorer 11
 - Microsoft Windows Firewall and Advanced Security
 - Postgres Database 9.x
- Conforms to SB327 requirements (and international iterations of such) by enforcing default password changes upon initial configuration.

Model Number

- **VXCMG2-NSVR** VideoXpert Enhanced Core and Media Gateway all-in-one hardware; EU, US, and UK power cords included

Supplied Accessories

- Keyboard
- Mouse
- Rackmount kit
- Power cords (US, UK, and EU)

Optional Power Accessories

- **VX3930-PS** Spare power supply



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