

VideoXpert Core Media Gateway®

Product Features

- Provides scalability and modular expansion
- Ideal for systems requiring enhanced performance, redundancy, and bandwidth; maximum support for up to 4000 cameras (or 7000 cameras with the optional 10Gb SFP+ kit) 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

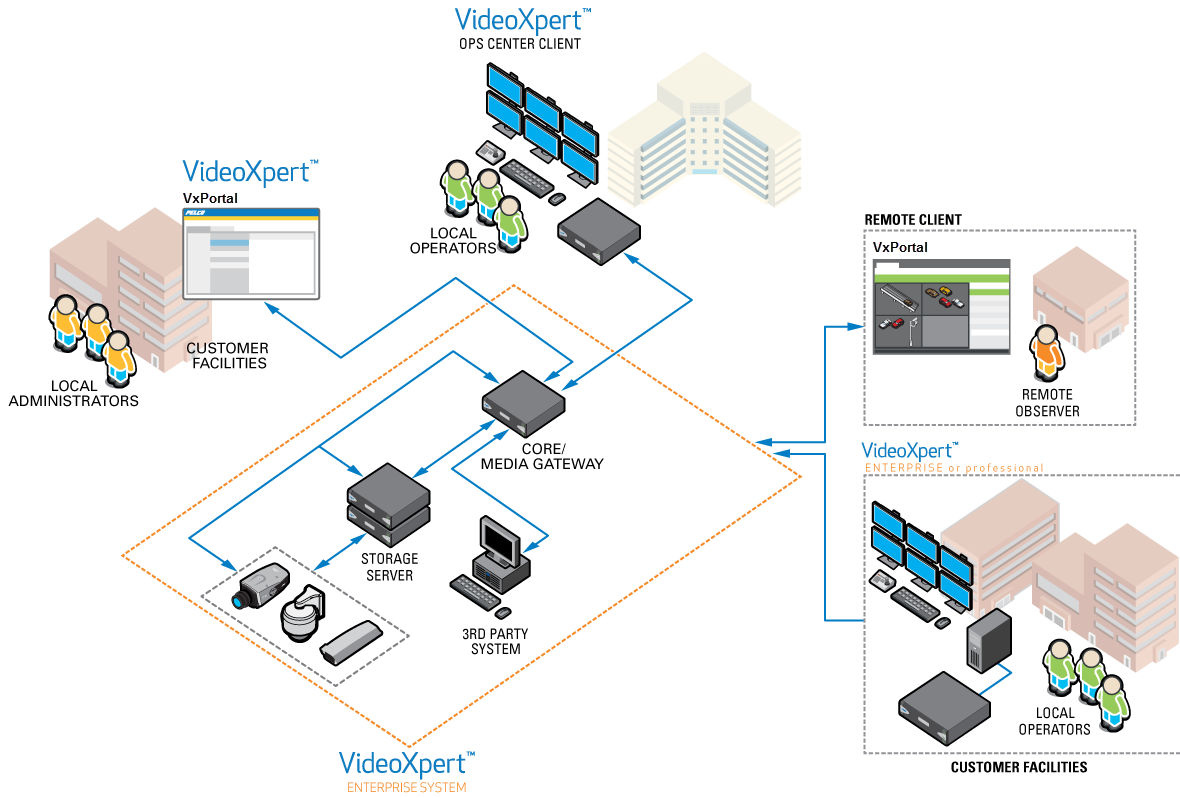
The VideoXpert Media Gateway routes video traffic to appropriate users as requested. The Media Gateway:

- 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® E-2286G
Memory	64 GB DDR4 ECC
Operating System	Microsoft® Windows® Server 2019
SSD Storage	512 GB
USB Ports	
USB Type-A 3.1 Gen1	2x front
USB Type-C 3.1 Gen2	1x front; 2x rear

Video

Item	Description
Video system	Intel UHD Graphics P630
Memory	Shared
Video Outputs	USB Type-C (USB Type-C to VGA adapter included)
Maximum Resolution	4096 x 2304 at 60 Hz

Networking

Item	Description
Interface	1 Gigabit Ethernet (1000Base-T), 10 Gigabit Ethernet (10BBase-T)
IP version	IPv4 and IPv6

Front Panel

Item	Description
Buttons	Power
Indicators	
Unit Status	White, amber (behind bezel)
Hard Disk Status	White (behind bezel)

Power

Item	Description
Power Input	100 to 240 VAC 50/60 Hz \pm 5%, autoranging
Power Supply	1 included, 2 maximum
Power Consumption	550 W, 7.4 A / 3.7 A (maximum)

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)

Item	Description
Operating Relative Humidity	10% to 85% (maximum dew point temperature 40°C / 104°F), non-condensing
Non-Operating Relative Humidity	10% to 90% (maximum dew point temperature 60°C / 140°F), non-condensing
Operating Altitude	3,048 m (10,000 ft)
Operating Vibration	0.26 GRMS
Storage Vibration	2.0 GRMS



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)	57.75 x 48.2 x 4.28 cm (22.73 x 18.97 x 1.68 in) without bezel
Mounting (RU)	1 RU
Unit Weight	12.42 kg (27.68 lb)

Certifications

Item	Description
CE	Class A
FCC, Part 15	Class A
ICES-003	Class A
BIS	✓
UL/cUL Listed	✓
RCM	✓
CCC	✓

Item	Description
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 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

- **VXCMG3-NSVR** VideoXpert 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 Accessories

- **VXCMG3-10GKIT** 10GbE network interface card for VXCMG3-NSVR

Optional Power Accessories

- **VX3930-PS** Spare power supply



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