Network Video (IP) Server

Description

The Network Video Server can be used where analog/network cameras are already in place. It is an integral part of the Fike Video Analytics early warning fire detection system acting as the video management system and communications conduit between third party ONVIF IP cameras or analog cameras outfitted with an ONVIF capable IP encoder and the Video Management Software (VMS). Contact Fike Video Analytics for camera compatibility.

The server is capable of continuously recording and digitally storing video images from up to 16 ONVIF cameras. The server's proprietary onboard analytics continuously monitors the video, frame-by-frame, pixel-by-pixel to detect anomalies characteristic of fire, smoke, and motion within the field of view of the camera. In the event of a fire or the production of smoke, the server will issue a warning signal by digitally streamed transmissions over IP to a VMS workstation. Server video processing algorithms include:

Flaming Fires - looks for a specific fire pattern consisting of a bright core of the flame and a flickering corona.

Smoke Plumes - identifies the anomalies that are caused by smoke and analyzes the progression over a period of time to identify a growing smoke plume.

Ambient Smoke - monitors the light diffusion from light sources and bright objects in the video images to detect the pattern consistent with the slow accumulation of smoke.

Intrusion Detection - can monitor multiple areas of the video image for the presence of moving objects at different times. This can be used to detect and record wanted or unwanted persons.

Multiple Network Servers can be installed and accessed over a single IP network by one VMS workstation for easy scalability. This provides the ability to build an enterprise-level surveillance system with a large number of cameras that can be monitored and configured from a single VMS workstation.

12 and 18 TB Server

Features

- Handles up to 16 ONVIF cameras or encoder channels. *All ONVIF cameras used must have a 640 x 480 stream @15 fps available.*

- Provides early warning flame, smoke and motion detection similar to the Fike Video Analytics IP camera

- Multiple unit scalability over IP network

- Remote monitoring over LAN or Internet using the Fike Video Analytics Video Management Software (VMS)

- Remote playback of archived events

- Addresses security storage needs of an organization

- Requires a 1 GB network to support video transition

- Provides continuous video recording for each Fike Video Analytics IP camera marking the events reported (flame, smoke, and motion)

- Recorded video can be downloaded in .wmv or .axm format

Ordering Information

P/N	Description
28-141	Fike Video Analytics Server 12 TB - 4 channel ONVIF Compliant IP Video Streams Upgradeable to 8 channel w/license pack purchase
28-142	Fike Video Analytics Server 12 TB - 8 channel ONVIF Compliant IP Video Streams
28-143	Fike Video Analytics Server 18 TB - 12 channel ONVIF Compliant IP Video Streams, Upgradeable to 16 channel w/license pack purchase
28-144	Fike Video Analytics Server 18 TB - 16 channel ONVIF Compliant IP Cameras
28-059	Network Video Server 4 channel license pack

Specifications

Chassis	RAVE 3U 21" Depth with 1x Rackmount Rail Kit and Necessary Cables, Brackets and Fans
Motherboard	(1) EPC621D8A SuperMicro, Integrated Audio
Processor	Intel® Xeon® Gold 6226R (22M cache, 2.90-3.90 GHz) 16C/36T
Memory	(2) 8GB DDR4-2933 ECC REG Memory Modules (16GB total)
Network	4 ports, 1-10Gb
OS Drive	(1) Gold 1TB Enterprise Class HDD
Storage Drives	(3) Gold 4TB Enterprise Class HDD (P/N 28-141 or 28-142)
	(3) Gold 6TB Enterprise Class HDD (P/N 28-143 or 28-144)
Graphics Card	(1) Quadro P400v2, 3 mini display ports
Power Supply	1x 500W 2U with Conformal Coating
Operating System	Windows® Server Standard 2019, 64-bit
Event Notification	Video Management Software over TCP/IP and Wise Relay
Recording Capacity	Varies based on the number of video channels and recording frame rate settings. Refer to FSM-IP NVR manual for additional information.
Environmental	Operating Temperature Range: 10-35°C (50-95°F) Non-operating Temperature Range (stored): -20-60°C (-4-140°F) Operating Humidity (RH): 10-90% Non-operating Humidity (RH): 10-95%

System Architecture

In its basic configuration, the Fike Video Analytics system will consist of at least one ONVIF IP camera, network video server, and a Windows-based PC running the Fike Video Management Software (VMS), all connected to the same high-speed local area network (LAN). Remote VMS workstations can be located on a different network and will communicate normally as long as the NVR is accessible over a TCP connection.

Where Alarm annunciation is required, a Wise-7167 relay module can be connected to the system to provide dry-contact relay connections. These connections can be tied into an FM Approved Fire Alarm Control Panel (FACP) to signal system events.

System Architecture

Network Requirements

For the server to function correctly and communicate with the ONVIF IP cameras, they must all share the same high-speed local area network (LAN).

If integrating the Fike Video Analytics components into an existing LAN, consult with your IT representative or system administrator to ensure that adequate capacity is available to handle the camera(s) bandwidth. Contact your Fike Video Analytics distributor for additional information regarding network requirements.

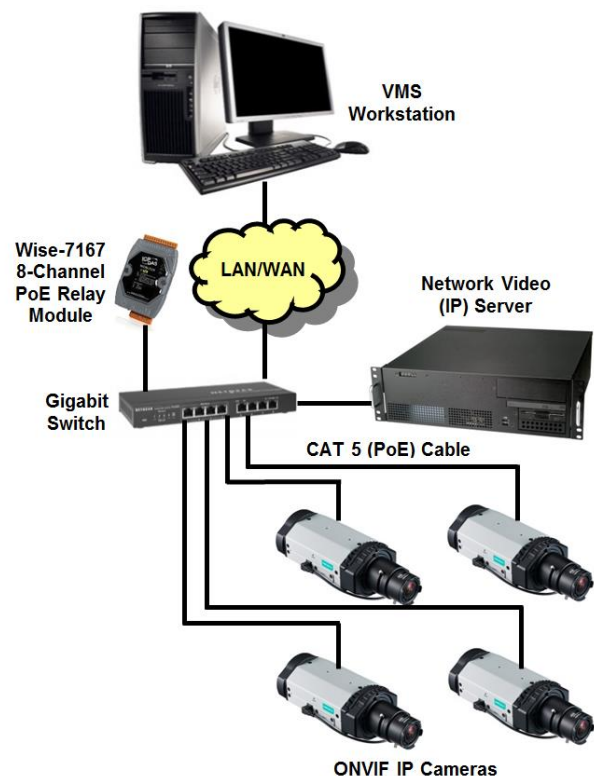This document is only intended to be a guideline and is not applicable to all situations. Information is subject to Fike's full disclaimer at http://www.fike.com/disclaimer.

ISO 9001:2015 Certified