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. It acts 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 camera's field of view. In the event of a fire or the production of smoke, the server will issue a warning signal by digitally streaming 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 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 many cameras that can be monitored and configured from a single VMS workstation.

Network Video 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

- Rated for use in marine environments

- Units available with redundant power supply

Mackay
Marine Electronics & Satellite Communications
www.mackaymarine.com

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Ordering Information

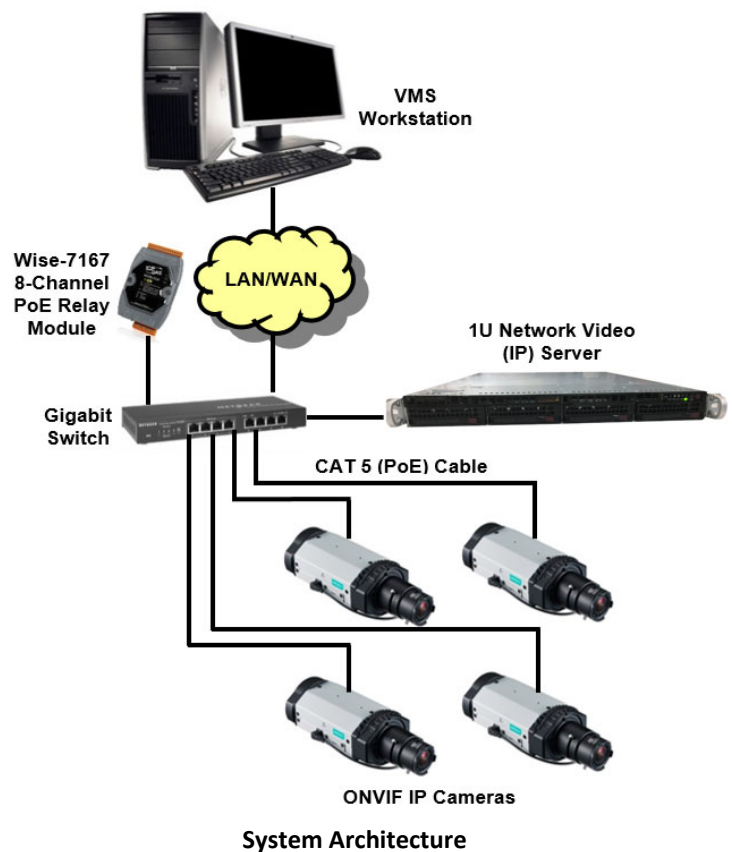| P/N	Description
28-151	1U Fike Video Analytics Server, 18 TB, 4 channels (ONVIF Compliant IP Video Streams). *Upgradeable to 8 channels w/license pack purchase.*
28-152	1U Fike Video Analytics Server, 18 TB, 8 channels (ONVIF Compliant IP Video Streams)
28-153	1U Fike Video Analytics Server, 18 TB, 12 channels (ONVIF Compliant IP Video Streams). *Upgradeable to 16 channels w/license pack purchase.*
28-154	1U Fike Video Analytics Server, 18 TB, 16 channels (ONVIF Compliant IP Cameras)
28-153-RP	1U Fike Video Analytics Server, 18 TB, 12 channels (ONVIF Compliant IP Video Streams), Redundant Power Supply. *Upgradeable to 16 channels w/license pack purchase.*
28-154-RP	1U Fike Video Analytics Server, 18 TB, 16 channels (ONVIF Compliant IP Cameras), Redundant Power Supply
28-059	Network Video Server 4 channel license pack

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 communicate normally if the server 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.

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 Fike or your Fike Video Analytics distributor for additional information regarding network requirements.

System Architecture

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ISO 9001:2015 Certified

Specifications

Chassis	
Form	1U Chassis (black) with cables, brackets, fans, power supply, and mounting rails
Dimensions (HxWxD)	1.7 in x 17.2 in x 25.6 in (43 mm x 437 mm x 650 mm)
Gross Weight	36 lbs. (16.33 kg)
Power Supply	**28-151 through 28-154 servers**: 1U 600W platinum efficiency multiple output power supply with PMBus (conformal coated), 50-60 Hz
	28-153-RP and 28-154-RP serves: 1U 500W redundant power supply
Motherboard	
Processor	2nd Gen Intel® Xeon® 6208U 1P 16C/32T 2.9G 22M 150W
Memory	(2) 8GB 2933MHz ECC DDR4 1Rx8 RDIMM
Storage	
Operating System	(1) 3.5" 1TB SATA 6Gb/s 7.2K RPM Cache 256MB, 512N
Video Stream	(3) 3.5" 6TB SATA, 6Gb/s 7.2K RPM Cache 256MB, 512e/4Kn
Video	
Graphics Processing Unit	(1) NVIDIA Quadro P400v2, 2 GB GDDR5, PCI Express 2.0 x16, active cooling
Management	
Operating System	Windows® Server Standard 2019, 64-bit
Video Management Software	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 the FSM-IP NVR manual for additional information.
Operating Environment	
Operating Temperature	10 - 35°C (50 - 95°F)
Operating Relative Humidity	8 - 90% (non-condensing)[1]
Non-Operating Temperature	-40 - 70°C (-40 - 158°F)
Non-Operating Relative Humidity	5 - 95% (non-condensing)

[1] Rated for marine environments.