

OE-ME A&E SPECIFICATIONS
OPENEYE NVR CLOUD-MANAGED PoE APPLIANCE
www.openeye.net

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

28 20 00 Electronic Surveillance

28 23 00 Video Surveillance

28 23 13 Video Surveillance Control and Management Systems

28 23 16 Video Surveillance Monitoring and Supervisory Interfaces

28 23 19 Digital Video Recorders and Analog Recording Devices

28 23 23 Video Surveillance Systems Infrastructure

28 23 26 Video Surveillance Remote Positioning Equipment

28 23 29 Video Surveillance Remote Devices and Sensors

PART 1 GENERAL

1.1 SUMMARY

1. This section includes the minimum requirements for NVR Appliances as a Service platform comprised of, but not limited to, the following components:
 - A. Network Video Recorder Hardware
 - B. Network Video Management Software
 - C. Online Web Services

2. References
 - A. 28 23 00 Video Surveillance
 - B. 28 23 13 Video Surveillance Control and Management Systems
 - C. 28 23 19 Digital Video Recorders and Analog Recording Devices
 - D. 28 23 23 Video Surveillance Systems Infrastructure

E. 28 23 29 Video Surveillance Remote Devices and Sensors

1.2 SUBMITTALS

1. Manufacturer's data sheets in digital or printed form.
2. Manufacturer's installation and operations manuals in digital or printed form.

1.3 QUALIFICATIONS

1. Manufacturer
 - A. Manufacturer shall have been in business for more than 10 years.
2. Installer
 - A. All installation, configuration, setup and related work shall be performed by an authorized technician certified by the manufacturer.
 - B. All installation shall be performed by a technician licensed to install and service video surveillance and security equipment as mandated by the authority having jurisdiction.

1.4 WARRANTY & SUPPORT

1. The Network Video Recorder shall come with a minimum 3 year manufacturer's warranty with the 1st year including advance replacement service.
2. The Network Video Recorder shall come with a heroic customer service support structure, including a 1-888 number for technical service, pre and post sales assistance, and full access to online technical support as well as online sales support.
3. Technical support shall be available for 24 hours per day 7 days per week to all integrators and dealers free of charge.
4. System updates and patches shall be available free of charge.

- END OF SECTION -

PART 2 PRODUCTS

2.1 DOCUMENT SUMMARY

1. This document specifies the minimum criteria for the design and performance of the OE-ME NVR PoE Appliance.

2.2 STANDARDS

1. The Network Video Recorder meets or exceeds the following requirements of the following publications and organizations.
 - A. Joint Photographic Experts Group (JPEG)
 - B. Moving Picture Experts Group (MPEG) (H.264/MPEG-4 Part 10 AVC)
 - C. National Television System Committee (NTSC)
 - D. Phase Alternation by Line (PAL)

2.3 SYSTEM DESCRIPTION

1. The Network Video Recorder shall offer the latest in digital recording technology, product reliability, security, ease of use, and customer support structure.
2. The Network Video Recorder shall be offered in configurations up to 24 channels with a system wide recording bitrate of up to 100Mbps.
3. The Network Video Recorder shall come equipped with an 8 or 16 channel onboard Plug and Play PoE+ switch capable of supporting megapixel HD IP video.

2.4 OPERATING SPECIFICATIONS

1. Environmental Conditions: the Network Video Recorder shall be designed to operate under the following environmental specifications:
 - A. Operating Temperature: 40°F to 104°F (5°C to 40°C) non-condensing.
2. Power Requirements: Recorder shall have the following electrical specifications:
 - A. Power Requirement: 115 – 230 VAC
 - B. Max Power Consumption: 195W
 - C. PoE Power Consumption: 150W (max 25W per port)
 - a. PoE will power all available functions.

3. Product Label Requirements:

- A. The Network Video Recorder shall have the FCC and UL certifications clearly marked on the product and box label.
 - i. Dimensions: W: 17.25 x H: 1.75 x D: 13.5in (438 x 44 x 343mm).
 - ii. Weight: 20lbs (9.07kg)

2.5 OPERATIONAL REQUIREMENTS

- 1. NVR Cloud-Managed PoE Appliance – The network video recorder shall include, as a minimum, the following features/functions/specifications. The network video recorder shall:
 - A. Include an Intel Celeron quad-core processor.
 - B. Include 4 Gigabytes of system memory
 - C. Include dual 10/100/1000 Network Interface connections.
 - D. Provide one dedicated Intel GbE network port for Client Networks and one dedicated Intel GbE network port for Camera Networks.
 - E. Be optimized for and support the Linux Operating System.
 - F. Provide recording support for high resolution Megapixel HD IP video.
 - G. The NVR shall include remote capabilities including free VMS and mobile applications for Apple and Android devices.
 - H. Include the ability to unlock additional IP camera licenses offering up to a combined total of 24 IP cameras per NVR with a maximum recording throughput of 100Mbps.
 - I. Support static IP and DHCP IP addressing through user configurable TCP/IP settings.
 - J. Be capable of recording up to 30 IPS on a single channel in an environment where all channels are being utilized.
 - K. Offer four Alarm Sensor Inputs and two Digital Relay outputs
 - L. The NVR shall come standard with an eMMC Solid State Drive.
 - M. The eMMC SSD shall be exclusively dedicated to the Operating System. No Video will be allocated to the SSD for the purposes of video storage or archiving.
 - N. Offer the following on-board hard drive capacity options with internally installed, large capacity HDD (12 Terabyte drives) support:
 - a. 2.0 Terabytes
 - b. 4.0 Terabytes

- c. 6.0 Terabytes
 - d. 8.0 Terabytes
 - e. 12.0 Terabytes
 - f. 16.0 Terabytes
 - g. 20.0 Terabytes
 - h. 24.0 Terabytes
- O. Only use high performance Video Surveillance rated hard drives engineered for reliability and 24x7 “always on” environments.
- P. Be housed in a compact 1U form factor chassis.
- Q. Provide internal cooling through two 40mm side-mounted fans.
- R. Provide an 8 or 16 channel onboard Plug and Play PoE+ switch capable of supplying up to 150W system load at 25W per port.
- S. Allow for Plug and Play connection with OpenEye or ONVIF cameras.
- T. Provide a full auto-switching power supply rated at 290W
- U. Support up to 4K maximum display resolution
- V. Have the ability to easily backup important video to an external cloud-managed location, or a USB device. The recorder must not stop recording during the backup process. To ensure the integrity of data, the cloud-managed appliance shall use a proprietary viewer that can detect image tampering.
- W. Include a minimum of the following front panel controls:
- a. Two 2.0 USB ports
- X. Include a minimum of the following rear-panel connectors:
- a. 8 or 16 PoE+ Ports
 - b. One Power input
 - c. Two USB 3.0 inputs
 - d. Two USB 2.0 inputs
 - e. One HDMI connector with a maximum 4K display resolution
 - f. Two 10/100/1000 RJ-45 Network Ports
 - g. One VGA connector with a maximum 1080P display resolution

h. Line in / Speaker out – RCA

Y. Include the following components:

- a. USB Mouse
- b. USB Keyboard QWERTY
- c. System Recovery USB
- d. Power Cord
- e. User Quick Start Guide
- f. Rack Mount Installation Kit

2. LIST OF SUPPORTED MODELS

A. The Network Video Recorder shall be one of the following models or an approved equivalent:

OE-MEX0802*	8 Port PoE (120W) Appliance, w/ Linux OS, and 2TB
OE-MEX0804*	8 Port PoE (120W) Appliance, w/ Linux OS, and 4TB
OE-MEX0806*	8 Port PoE (120W) Appliance, w/ Linux OS, and 6TB
OE-MEX0808*	8 Port PoE (120W) Appliance, w/ Linux OS, and 8TB
OE-MEX0812*	8 Port PoE (120W) Appliance, w/ Linux OS, and 12TB
OE-MEX0816*	8 Port PoE (120W) Appliance, w/ Linux OS, and 16TB
OE-MEX1602*	16 Port PoE (150W) Appliance, w/ Linux OS, and 2TB
OE-MEX1604*	16 Port PoE (150W) Appliance, w/ Linux OS, and 4TB
OE-MEX1606*	16 Port PoE (150W) Appliance, w/ Linux OS, and 6TB
OE-MEX1608*	16 Port PoE (150W) Appliance, w/ Linux OS, and 8TB
OE-MEX1612*	16 Port PoE (150W) Appliance, w/ Linux OS, and 12TB
OE-MEX1616*	16 Port PoE (150W) Appliance, w/ Linux OS, and 16TB
OE-MEX1620*	16 Port PoE (150W) Appliance, w/ Linux OS, and 20TB
OE-MEX1624*	16 Port PoE (150W) Appliance, w/ Linux OS, and 24TB

* (Appliance Software and OWS Licensing Sold Separately)

PART 3 EXECUTION

3.1 INSTALLATION

1. Installer shall comply with all instructions and best practices specified by the hardware and software manufacturer.
2. Installer shall comply with all applicable state and local regulatory requirements.

3.2 STORAGE

1. Equipment shall be stored in environmental conditions within the stated temperature and humidity ranges specified by the hardware manufacturer.

3.3 COMISSIONING

1. The manufacturer shall offer the option for factory pre-configuration of all hardware and software purchased from the manufacturer as an additional paid service.
2. The manufacturer shall offer the option for remote or in person system commissioning as an additional paid service.

- END OF SECTION -

END OF DOCUMENT