OPENEYE OE-C9912M20 A&E SPECIFICATIONS  
20MP Outdoor IP Multisensor Camera  
[www.openeye.net](http://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. SUMMARY

1. This section includes the minimum requirements for Security Cameras as a Service platform comprised of, but not limited to, the following components:
   1. Network Camera Hardware
   2. Network Camera Firmware
   3. Network Video Management Software
   4. Online Web Services
2. References
   1. 28 23 00 Video Surveillance
   2. 28 23 13 Video Surveillance Control and Management Systems
   3. 28 23 19 Digital Video Recorders and Analog Recording Devices
   4. 28 23 23 Video Surveillance Systems Infrastructure
   5. 28 23 29 Video Surveillance Remote Devices and Sensors
   6. SUBMITTALS
3. Manufacturer’s data sheets in digital or printed form.
4. Manufacturer’s installation and operations manuals in digital or printed form.
   1. QUALIFICATIONS
5. Manufacturer
   1. Manufacturer shall have been in business for more than 10 years.
6. Installer
   1. All installation, configuration, setup and related work shall be performed by an authorized technician certified by the manufacturer.
   2. 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.
   3. WARRANTY & SUPPORT
7. The Network Video Camera shall come with a minimum 3-year manufacturer’s warranty with the 1st year including advance replacement service.
8. The Network Video Camera 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.
9. Technical support shall be available for 24 hours per day 7 days per week to all integrators and dealers free of charge.
10. Firmware updates and patches shall be available free of charge.

- END OF SECTION -

SECTION 2 PRODUCTS

* 1. DOCUMENT SUMMARY

1. This document specifies the minimum criteria for the design and performance of the OE-C9912M20 Network Video Camera.
   1. STANDARDS
2. The Network Video Camera meets or exceeds the following requirements of the following publications and organizations.
   1. Joint Photographic Experts Group (JPEG)
   2. Moving Picture Experts Group (MPEG) (H.264/H.265/MPEG-4 Part 10 AVC)
3. The Network Video Camera meets or exceeds the following mechanical standards:
   1. IK10 Impact Rating
   2. IP66 Ingress Protection
   3. SYSTEM DESCRIPTION
4. The Network Video Camera shall offer the latest in digital capture technology, product reliability, security, ease of use, and customer support structure.
5. The Network Video Camera shall be an outdoor camera. The Network Video Camera shall come equipped with an IR Cut Filter for day and night video.
   1. OPERATING SPECIFICATIONS
6. Environmental Conditions: the Network Video Camera shall be designed to operate under the following environmental specifications:
   1. Operating Temperature: -40°F ~ 131°F (-40°C~55°C) (IR OFF) non-condensing.
7. Power Requirements: Components shall have the following electrical specifications:
   1. Power Requirement: PoE++ (IEEE 802.3bt) / 24V DC / 24V AC
   2. Max power: 40 Watts
   3. Class 5 PoE will power all available functions.
8. Product Label Requirements:
   1. The Network Video Camera shall have the FCC and UL certifications clearly marked on the product and box label.
      1. Dimensions:
         1. Package: 13.9” x 13.9” x 11.6” (352 x 352 x 295mm)
         2. Package Label: 2.5” x 1.9” (63 x 50mm)
         3. Product Label: 1” x 0.8” (26 x 20mm)
      2. Weight: 7.5lbs (3.4kg)
   2. OPERATIONAL REQUIREMENTS
9. NETWORK VIDEO CAMERA – The network video camera shall include, as a minimum, the following features/functions/specifications. The network video camera shall:
   1. Include two built-in memory card slots, available for microSD/SDHC/SDXC memory cards, capacity up to 512GB.
   2. Include four high-quality Progressive CMOS image sensors.
   3. Include four 2.7~13.5mm VF, AF, Motorized Zoom lens.
   4. Have a field of view of 103° (wide) ~ 34° (tele).
   5. Include wide dynamic range (WDR) function balancing scenes with high contrast lighting.
   6. Include integrated IR with a range of up to 131’.
   7. Have a white balance function that is adjustable through the camera’s web interface.
   8. Have a backlight compensation function that is adjustable through the camera’s web interface.
   9. Include a mechanical IR cut filter that is removed during low light conditions to improve low light imaging. This shall be referred to as a True Day/Night function.
   10. Have a gain control function that is adjustable through the camera’s web interface.
   11. Include 1 audio line in connection.
   12. Include 1 audio line out connection.
   13. Include 1 alarm in connection.
   14. Include 1 alarm out connection.
   15. Have a reset button on the camera to restore the device to default parameters.
10. TRANSMISSION CAPABILITIES – The network video camera shall provide the following characteristics/features/functions. The network video camera capabilities shall:
    1. Be capable of encoding video for network transmission across a LAN or WAN.
    2. Be capable of compressing and transmitting video data using H.264 and H.265 compression methods.
    3. Be compliant with the ONVIF standard for Network Video Transmitters (NVT).
    4. Have user authentication for secure video transmission and shall be capable of up to 32 user accounts.
    5. Be capable of providing up to three individually configured H.264 video streams per sensor.
    6. Be capable of providing video in H.264 at resolutions as high as 2592 x 1944 per image sensor.
    7. Be capable of providing video at the following resolutions: 2592 x 1944, 2560 x 1440, 2304 x 1296, 2048 x 1536, 1920 x 1080, 1600 x 1200, 1280 x 960, 1280 x 720, 800 x 600, 864 x 480, 768 x 432, 640 x 480, 640 x 360.
    8. Provide 5MP video at a maximum of 30 Frames per Second (FPS) when set to H.264.
    9. Allow the user to set the Group of Pictures (GOP) rate for the H.264 and H.265 streams to fine tune the video transmission.
    10. Include framerate control that allows the user to enter any rate from 0-30.
    11. Include a video compression setting that allows the user to set the video compression bit rate.
    12. Include the ability to switch from Variable Bit Rate (VBR) mode to Constant Bit Rate (CBR) mode.
    13. Include the ability to enable Smart ROI to allow the user to dynamically reduce their throughput.
    14. Include the following Image Rotation options:
        1. Flip left-to-right
        2. Flip top-to-bottom
    15. Include a Motion Detection function.
        * 1. The Motion Detection function must allow for 5 separate motion detection areas.
          2. The Motion Detection function must allow for configurable sensitivity and object detection size.
          3. The Motion Detection function must have configurable actions that occur when motion is detected, including sending a notification email with a JPG attachment, triggering the alarm output on the camera, recording the video stream for a pre-defined duration to an internal microSD card, saving pre-defined number of snapshot images to an internal microSD card.
    16. Have the ability to sync with an NTP server.
    17. Have the ability to be discovered over multiple sub-nets with the use of a Camera Discovery Tool.
    18. With the Camera Discovery tool have the ability to configure network settings, configure video stream and image settings, and update firmware on multiple cameras at the same time.
11. KEY ACCESSORIES – The camera shall have the following accessories for mounting and controlling the camera in various settings:
    1. OE-CA00WM-01 – Indoor/Outdoor Wall Mount; (combine w/ OE-CA00CM-01 to mount onto corners and OE-CA00PMK-02 to mount onto poles.)
    2. OE-CA00CMP-01 – Ceiling Mounted Pole.
12. LIST OF SUPPORTED MODELS
    1. The Network Video Camera shall be the following model or an approved equivalent:

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| OE-C9912M20 | 20MP Outdoor Multisensor with 2.7~13.5mm, VF, AF, Motorized Zoom lens |

**PART 3 EXECUTION**

* 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.
   1. STORAGE
3. Equipment shall be stored in environmental conditions within the stated temperature and humidity ranges specified by the hardware manufacturer.
   1. COMISSIONING
4. The manufacturer shall offer the option for factory pre-configuration of all hardware and software purchased from the manufacturer as an additional paid service.
5. The manufacturer shall offer the option for remote or in person system commissioning as an additional paid service.

- END OF SECTION -

END OF DOCUMENT