

MobileView® 9002 Series Exterior Camera Specifications

# Overview

* 1. MobileView 9002 Series Cameras shall be distributed by MobileView or an approved equal.
  2. Supported Cameras include:
     1. MVC-9002-28-WI
     2. MVC-9002-40-WI
  3. Cameras shall have the ability to capture, encode and transmit video over a network.
  4. Cameras shall support the encoding of all images with a digital watermark. The verification of watermarked images shall reside solely with the manufacturer.

# Camera

* 1. The 9002 Series camera shall include, but not be limited to the following:
     1. The camera shall provide 1/3” Progressive Scan CMOS sensor.
     2. The camera shall provide IR Cut filter.
     3. The camera shall provide infrared LED lights.
     4. The camera shall provide smart IR function, to avoid over-exposure.
     5. The camera shall provide 15m IR range at minimum.
     6. The camera shall provide low-light capabilities with sensitivity down to 0.01 Lux at 70 IRE in Color @ f1.2 (AGC on), and 0 Lux at 70 IRE in B/W with IR @ f1.2 (AGC on).
     7. The camera shall provide integrated heater.
     8. The camera shall provide 2.8mm or 4mm lens.
     9. The camera shall support both +12VDC and PoE (802.3af) power supply.
     10. The camera shall consume no more than 6.0W.
     11. The camera shall provide reset button.
     12. The camera shall provide 3D noise reduction function.
     13. The camera shall provide Digital Wide Dynamic Range function.
     14. The camera shall provide White balance function.
     15. The camera shall support 3-axis adjustment.
     16. The camera shall support mirror and rotate mode.
     17. The camera shall support protocol:
         1. TCP/IP
         2. HTTP
         3. DDNS
         4. RTSP
         5. PPPoE
         6. IPv4
     18. The camera shall support:
         1. ONVIF (Profile S)
         2. PSIA
         3. CGI
     19. The camera lens shall provide the following Field of View in horizontal, vertical and diagonal:

2.8mm lens HFOV: 92.5° VFOV: 67.3° DFOV: 122°

4.0mm lens HFOV: 73.1° VFOV: 53.3° DFOV: 95.4°

* 1. Camera shall meet or exceed these SAE-J1455 standards:
     + 1. Shock: SAE J1455, Section 4.11.3.4
       2. Vibration: SAE J1455, Section 4.10.4.2
       3. Thermal Shock: SAE J1455, Section 4.1.3.2
       4. Voltage: Section SAE J1455, Section 4.13.1
       5. Voltage Transients: SAE J1455, Section 4.13.2.2
       6. Electrostatic Discharge: SAE J1455, Sec 4.13.2.2.3
       7. Radiated Susceptibility: SAE J1455, Section 4.13.3.4.2
       8. Conducted Susceptibility: SAE J1455, Section 4.13.3.4.5
     1. Camera shall meet or exceed these EN50155 and EN50121 standards:
        1. Shock & Vibration: EN 50155, Section 12.2.11
        2. Temperature Operating: EN50155, Section 12.2.3 & 12.2.4
        3. Humidity Operating: EN50155, Section 12.2.5
        4. Temp/Humidity Non-Operating: EN50155, Section 12.2.14
        5. Electrostatic Discharge: EN50155, Section 12.2.7.2 (EN50121-3-2, Table 9, Section 9.3)
        6. Conducted Susceptibility: EN50155, Section 12.2.8.1 (EN 50121-3-2, Table 7 & 8, Sections 7.1 & 8.1)
        7. Radiated & Conducted Emissions: EN50155 12.2.8.2 (EN 50121-3-2, Tables 4, 5, & 6)
        8. Surge: EN50155, Section 12.2.7.1 (EN 50121-3-2, Table 7, Section 7.3)
        9. Electrical Fast Transients: EN50155, Section 12.2.7.3 (EN 50121-3-2, Table 7 & 8, Sections 7.2 & 8.2)
        10. Supply Overvoltage: EN50155, Section 12.2.6

# Recording

* + 1. The 9002 Series camera shall support the following:
       1. Video compression shall support three simultaneous streams:
          1. Primary Stream: H.264
          2. Alternate Stream: H.264
          3. Alarm Stream: H.264
       2. Resolution shall be user configurable with the following options: 1920 x 1080, 1440 x 1080, 1280 × 960, 1280 × 720, 960 x 720, 704 x 480, 640 x 480, 427 x 240, 352 x 240, 320 x 240
       3. The camera shall support the following user programmable frame rates: 30, 25, 22, 20, 18, 16, 15, 12, 10, 8, 6, 4, 2, 1, 1/2, ¼, 1/8, 1/16
       4. The camera shall support the following bit rate: 64Kbps - 6Mbps
       5. The camera shall be able to continue streaming without disruption when the user adjusts the frame rate.
    2. The camera shall be user configured via Ethernet with a personal computer running a current web browser.
       1. The camera shall have an integrated web client interface to configure, upgrade and view the following information:
          1. View live video
          2. Hear live audio
          3. Configure system settings
          4. Configure network settings
          5. Configure camera settings
       2. Configurable options shall include:
          1. Service:

Auto-Defog (Heater)

* + - * 1. Video:

Resolution, frame rate and bit rate

Camera title and date/time

* + - * 1. Image:

Saturation

Brightness

Contrast

Sharpness

Exposure

Day/Night Settings

Backlight / Wide Dynamic Range

Digital Noise Reduction

Orientation (Rotate, Mirror)

* + - * 1. Alarms:

Video Tampering

Exception

* + - * 1. IP Settings:

TCP/IP

Port

* + 1. The camera shall support local video recording on a Micro SD Card, up to 64GB in size
       1. The camera shall include a 32GB Micro SD Card, pre-installed

# System Requirements

* 1. Operating System: Microsoft® Windows® XP, Windows 7®, or Windows® 8
  2. Screen Resolution: 1024 x 768 pixels or higher, 16- or 32-bit pixel color resolution
  3. Web Browser: Microsoft Internet Explorer® 8.0 or above, Firefox, Chrome 44 and lower

1. **Physical**
   1. The camera shall include the following connectors:
2. 12V Molex 39-01-2021
3. Communication: 1 RJ45 10 M/100M Ethernet port
4. Video Output: 1.0V peak-to-peak, 75 Ohm
   1. Electrical:
      1. Power Supply: 12VDC, PoE (IEEE 802.34af)
   2. Environmental:
      1. Ratings: IP68, IP66K, and IK-10
      2. Operating temperature: -30°C to +65°C (-22°F to 149°F) (cold start at -30°C, and continuous operation at -30°C)
   3. Physical:
      1. Dimension: 156 x 111 x 60 mm
      2. Weight: 1.9 lbs. (0.9 kg)
   4. The camera shall conform to these internationally recognized compliance standards:
      1. FCC
      2. CE
      3. UL
      4. RoHS
5. **Accessory**
   1. The camera shall include the following accessories in the package box:
6. Y Splitter Cable
7. Drill Template
8. Hex Wrench
9. Quick Operation Guide
10. Molex Connector/Pins
11. Molex Adapter Cable