



# Technical Specifications

## **MOBOTIX MOVE 2MP Vandal Dome Camera**

A performant 2MP, full HD 1080p resolution camera for the daily security and surveillance needs. The camera easily adapts to different indoor and outdoor scenes.

- 2.8 to 12 mm Manual Vari-Focal Lens
- Wide Dynamic Range (WDR) max. 130 dB
- Light Sensitivity: Color 0.08 lux, B/W 0.008 lux
- PoE power support (IEEE802.3af)
- Integrated IR LEDs up to 40 m/131 ft distance
- Outdoor suitable (IP66) and vandal proof design (IK10)
- ONVIF Profile S/G/T/M support
- Temperature Range -55 to 60 °C/-67 to 140 °F



BeyondHumanVision

**MOBOTIX** MOVE

## Technical Specifications

### MOBOTIX MOVE 2MP Vandal Dome Camera

---

## Product Information

Product Name	2MP Vandal Dome Camera
--------------	------------------------

Order Code	Mx-VD2A-2-IR
------------	--------------

---

## Hardware Design

Processor	Ambarella S6L22m (Quad-core ARM® Cortex®-A53, 600 MHz)
-----------	--

Memory	RAM: 512 MBytes FLASH: 256 MBytes
--------	--------------------------------------

Image Sensor	5MP, 1/2.7" Progressive CMOS OS05A20 (OmniVision)
--------------	---

Effective (Used) Pixels	1920x1080 (2MP)
-------------------------	-----------------

---

## Lens

Minimum Illumination	Color: 0.08 lux B/W: 0.008 lux
----------------------	-----------------------------------

Lens Characteristics	Manual Vari-Focal Lens Focal Length: 2.8 to 12 mm Aperture: F1.4 to F2.8 Horizontal Field of View: 96.76° (Wide), 34.13° (Tele) Vertical Field of View: 52.21° (Wide), 19.24° (Tele)
----------------------	--

Lens Mechanics	3-Axis adjustment
----------------	-------------------

---

## Camera

Day/Night	Automatic mechanically switchable IR-cut filter
-----------	---

Shutter Speed	<b>Manual mode:</b> WDR: 1/17550 s Linear: 30 fps, 1/37440 s <b>Automatic Mode:</b> 1 to 1/10000 s
---------------	--

---

Frame Rate (maximum)	<b>WDR on:</b> H.265/H.264: 1920x1080@30fps + 720x480@30fps MJPEG: 1080p@30fps <b>WDR off:</b> H.265/H.264: 1920x1080@30fps + 720x480@30fps MJPEG: 1080p@30fps
Auto Gain	Min. gain: 3 dB, max. gain: 48 dB, step size: 3
WDR	Up to 130 dB Multi Exposure WDR & HDR Engine support
Zoom	Optical: 4.29x, Digital: 10x
Image settings	Color, Brightness, Sharpness, Contrast, White Balance, Exposure Control, 2DNR, 3DNR, NR by Motion, Masking, Text Overlay
Corridor Mode	90°, 180°, 270° Rotation

---

## Video Codec

Compression/Encoding	H.265/H.264/MJPEG
Streaming	Up to 4 individually configurable streams in H.264/H.265/MJPEG; configurable resolution, frame rate, bandwidth LBR/VBR/CBR in H.265/H.264.

---

## Cyber Security Features

Password Protection	Yes (including “forced” password change during initial setup)
IP address filtering	Yes (to restrict unauthorized access based on IP addresses)
IEEE 802.1X network access control	Yes (for advanced network security and authentication)
Digest authentication	Yes (for secure user authentication)
Secure Boot	Yes (support of fixed IP setting and automatic DHCP IP configuration according to individual MAC address)
AES encryption for password protection	Yes (to ensure strong encryption for password storage)
HTTPS/SSL (using TLS)	Yes (TLS 1.2 default, TLS 1.0/1.1 optional selectable)

---

## Technical Specifications

### MOBOTIX MOVE 2MP Vandal Dome Camera

---

User and Group Management	Yes (for fine-grained access control)
VPN	Yes (to establish secure network connections)
Digitally signed firmware	Yes (to prevent firmware file tampering)
RSA encryption	Yes (to support stronger ciphers; supported: RSA (2048 bits), AES-128, AES-256, SHA-256, SHA-384)

---

## Network

Interface	10/100 Mbps Ethernet
Supported Protocols	ARP, PPPoE, IPv4/v6, ICMP, IGMP, QoS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, HTTP, HTTPS, FTP, NTP, DDNS, SMBv2
ONVIF conformance	Supports profiles S/G/T/M
Supported Browsers	All current browsers are supported.

---

## System Integration

Base Video Analytics	<ul style="list-style-type: none"><li>▪ Motion Detection</li><li>▪ Tampering</li></ul>
Event Triggers	<ul style="list-style-type: none"><li>▪ Analytics</li><li>▪ Network failure detection</li><li>▪ Periodical event</li><li>▪ Manual trigger</li></ul>
Event Actions	<ul style="list-style-type: none"><li>▪ Video recording to edge storage</li><li>▪ File upload: FTP, network share and email</li><li>▪ Notification: HTTP, FTP, email</li></ul>

---

## General

Housing Material	Metal
Housing Color	RAL 9003
Power Requirements	PoE IEEE802.3af, class 0, max. 7.5 W

---

## Technical Specifications

### MOBOTIX MOVE 2MP Vandal Dome Camera

---

PoE Modes Supported	Mode A or Mode B
Connectors	RJ45
IR Illumination	850 nm; up to 40 m distance depending on scenery reflection
Video Storage	Micro SD/SDHC/SDXC card support up to 1 TB, Support for recording to NAS, MOBOTIX HUB, MOBOTIX MOVE NVR
Environmental Protection Class	IP66/IK10
Operating Temperature	-55 to 60 °C/-67 to 140 °F
Cold Start Temperature	-20 °C/-4 °F
Relative Humidity	90 % non-condensing
Storage Conditions	-20 to 70 °C/-4 to 158 °F
Approvals	EMC: CE/FCC, Safety: LVD, Environmental: IP66, IK10
MTBF	95,000 hours
Warranty	5 years
Dimensions	ø 133.8 x 117.4 mm
Weight	760 g

---

**NOTE!** Observe the [MOBOTIX MOVE Installation Hints](#) document to ensure optimum performance of the camera features.

# DORI Specifications

In the video surveillance context, “DORI” stands for Detection, Observation, Recognition and Identification and is based on IEC EN62676-4: 2015. These levels define the minimum pixels that a face of a person must have to provide proper identification, for example.

- **Detection:** Up to this distance, you can reliably determine if a person or vehicle is present.
- **Observation:** Up to this distance, you can see characteristic details of an individual, such as distinctive clothing.
- **Recognition:** Up to this distance, you can determine with a high degree of certainty whether an individual is the same as someone that has been seen before.
- **Identification:** Up to this distance, you can determine the identity of an individual beyond reasonable doubt.

DORI Level	Detection		Observation		Recognition		Identification	
	Wide	Tele	Wide	Tele	Wide	Tele	Wide	Tele
Mx-VD2A-2-IR	37 m/ 121 ft	101 m/ 331 ft	15 m/ 49 ft	40 m/ 131 ft	7 m/ 23 ft	20 m/ 66 ft	4 m/ 13 ft	10 m/ 33 ft

## Accessories

Picture	Order Code	Description
	Mx-M-VD-IC	Ceiling Flush Mount for MOBOTIX MOVE Vandal Dome cameras
	Mx-M-VD-DCT	Clear Replacement Dome for MOBOTIX MOVE Vandal Dome cameras
	Mx-M-VD-DCS	Tinted (smoked) Replacement Dome for MOBOTIX MOVE Vandal Dome cameras
	Mx-M-VD-W	Wall Mount set (2 pieces) for MOBOTIX MOVE Vandal Dome cameras
	Mx-M-VD-P	Pole Mount (junction mount) for MOBOTIX MOVE Vandal Dome cameras
	Mx-M-VD-C	Corner Mount for MOBOTIX MOVE Vandal Dome cameras
	Mx-NPA-UPOE1A-60W	UPoE Network Power Injector 60 W
	Mx-A-ETP1A-2601-SET	Media Converter Set Ethernet (PoE+) – Twisted-Pair



# Dimensions

**NOTE!** Download the drilling template from the section or on the MOBOTIX website: [www.mobotix.com](http://www.mobotix.com) > [Support](#) > [Download Center](#) > [Marketing & Documentation](#) > [Drilling Templates](#).

**CAUTION!** Always print or copy the drilling template at 100% of the original size!

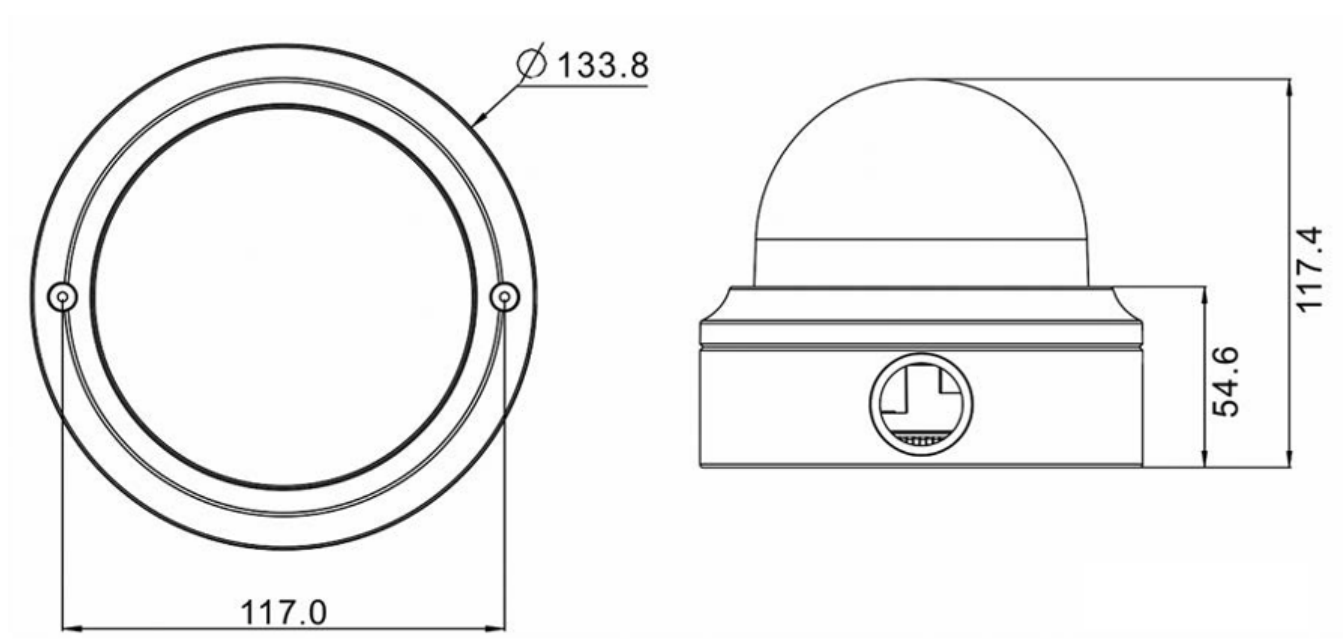


Fig. 1: 2MP Vandal Dome Camera: All measurements in mm



## Further Reading

[Manuals and Quick Installation documents](#)



[Technical Specifications](#)



[MOBOTIX MOVE Installation Hints](#)



[MOBOTIX Community](#)



# MOBOTIX

BeyondHumanVision

EN\_05/24

MOBOTIX AG • Kaiserstrasse • D-67722 Langmeil • Tel.: +49 6302 9816-103 • sales@mobotix.com • www.mobotix.com

MOBOTIX is a trademark of MOBOTIX AG registered in the European Union, the U.S.A., and in other countries. Subject to change without notice. MOBOTIX do not assume any liability for technical or editorial errors or omissions contained herein. All rights reserved. © MOBOTIX AG 2020