



# **S** MS8391-EV

series  
Multiple Sensor Network Camera



12MP · 180° Panoramic View · IP66 · IK10 · -50°C ~ 60°C ·  
30M IR · Smart Stream II

The VIVOTEK MS8391-EV is designed with multiple sensors providing higher resolution, maximizing the field of view and reducing the total number of cameras required, thereby saving on the installation costs. Featuring 4 x 3MP CMOS sensors, the multiple sensor network camera can monitor full horizontal views and deliver high-quality comprehensive coverage, making it an ideal outdoor surveillance solution with sharper images for more details. Covering a wide angle of 180 degrees, the MS8391-EV provides complete video security with no dead angles.

By having Multiple Sensors with 12-Megapixel resolution, users can ePTZ across the entire panoramic image for detailed views. Employing VIVOTEK's Smart Stream II technology, the MS8391-EV can reduce both bandwidth and storage consumption by up to 50%\* while maintaining high standards of image quality.

Additionally, as a professional day/night camera, it adopts a Smart IR technology which prevents overexposure and provides noise reduction to adjust the IR lighting intensity instantaneously based on the changes of light in the ambient environment. Finally, the MS8391-EV is armed with a robust IP66 and IK10-rated housing to enable the multi-sensor camera to withstand rain and dust as well as to protect against vandalism or tampering.

\* Depending on scene



Day View



Night View (IR Off)



Night View (IR On)

## Key Features

- 12-Megapixel Resolution
- 180° Panoramic View
- 7 fps @ 7552x1416
- Video Alignment to Have a Seamless Picture
- Smart IR Technology to Avoid Overexposure
- Built-in IR Illuminators, Effective up to 30 Meters
- Smart Stream II to Optimize Bandwidth Efficiency
- Weather-proof IP66-rated and Vandal-proof IK10-rated Housing
- -50°C ~ 60°C Wide Temperature Range for Extreme Weather Conditions



Campus



Station



Airport



Parking lot

## Technical Specifications

|                               |  |
|-------------------------------|--|
| Model                         | MS8391-EV  |
| <b>System Information</b>     |  |
| CPU                           | Multimedia SoC (System-on-Chip)  |
| Flash                         | 128MB  |
| RAM                           | 1GB  |
| <b>Camera Features</b>        |  |
| Image Sensor                  | 1/2.8" Progressive CMOS  |
| Maximum Resolution            | 7552x1416  |
| Lens Type                     | Fixed-focal  |
| Focal Length                  | f = 6 mm   |
| Aperture                      | F1.6   |
| Field of View                 | 180° (Horizontal)<br>34° (Vertical)  |
| Shutter Time                  | 1/5 sec. to 1/32000 sec.   |
| WDR Technology                | WDR Enhanced   |
| Day/Night                     | Removable IR-cut filter for day & night function   |
| Minimum Illumination          | 0.23 Lux @ F1.6 (Color)<br>0.01 Lux @ F1.6 (B/W)   |
| Preset Locations              | 20 preset locations  |
| Pan/Tilt/Zoom Functionalities | ePTZ:<br>48x digital zoom (4x on IE plug-in, 12x built in)   |
| IR Illuminators               | Built-in IR illuminators, effective up to 30 meters with Smart IR IR LED*4   |
| On-board Storage              | Slot type: MicroSD/SDHC/SDXC card slot<br>Seamless Recording   |
| <b>Video</b>                  |  |
| Compression                   | H.264 & MJPEG  |
| Maximum Frame Rate            | 7 fps @ 7552x1416  |
| Maximum Streams               | 4 simultaneous streams   |
| S/N Ratio                     | 63 dB  |
| Dynamic Range                 | 60 dB  |
| Video Streaming               | Adjustable resolution, quality and bitrate<br>Configurable video cropping for bandwidth saving<br>Smart Stream II  |
| Image Settings                | Time stamp, text overlay, flip & mirror, scheduled profile settings, configurable brightness/contrast/saturation/sharpness, white balance, exposure control, gain, backlight compensation, privacy masks |
| <b>Audio</b>                  |  |
| Audio Capability              | Two-way audio (full duplex)  |
| Compression                   | G.711, G.726   |
| Interface                     | External microphone input<br>External line output  |
| <b>Network</b>                |  |
| Users                         | Live viewing for up to 10 clients  |
| Protocols                     | IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, NTCIP, ARP, SSL, TLS   |
| Interface                     | 10 Base-T/100 BaseTX Ethernet (RJ-45)<br>*It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.   |

## Intelligent Video

**Video Motion Detection** Five-window video motion detection

## Alarm and Event

**Alarm Triggers** Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection

**Alarm Events** Event notification using digital output, HTTP, SMTP, FTP, NAS server and SD Card  
File upload via HTTP, SMTP, FTP, NAS server and SD card

## General

**Connectors** RJ-45 cable connector for Network/PoE connection  
Audio input  
Audio output  
AC 24V power input  
Digital input\*1  
Digital output\*1

**LED Indicator** System power and status indicator

**Power Input** AC 24V  
IEEE 802.3at PoE Class 4

**Power Consumption** AC 24V:  
Max. 43.5W/15.6W (Heater on/off)  
IEEE 802.3at PoE:  
Max. 23.5W/15.6W (Heater on/off)

**Weight** 2.9 kg

**Casing** Weather-proof IP66-rated, Vandal-proof IK10-rated

**Safety Certifications** CE, LVD, FCC Class A, VCCI, C-Tick, UL

**Operating Temperature** AC 24V:  
Starting Temperature: -40°C ~ 60°C (-40°F ~ 140°F)  
Working Temperature: -50°C ~ 60°C (-58°F ~ 140°F)  
IEEE 802.3at PoE:  
Starting Temperature: -20°C ~ 60°C (-4°F ~ 140°F)  
Working Temperature: -20°C ~ 60°C (-4°F ~ 140°F)

**Humidity** 90%

**Warranty** 36 months

## System Requirements

**Operating System** Microsoft Windows 8/7/Vista/XP/2000

**Web Browser** Mozilla Firefox 7~43 (Streaming only)  
Internet Explorer 7/8/9/10/11

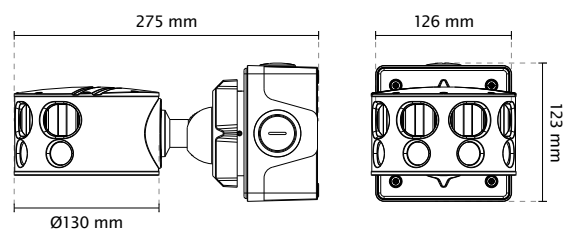
**Other Players** VLC: 1.1.11 or above  
Quicktime: 7 or above

## Included Accessories

**CD** User's manual, quick installation guide, Shepherd, VAST

**Others** Quick installation guide, warranty card, software CD, desiccant bag, alignment sticker, wall mount kit, screws, sun shield

## Dimensions



## Compatible Accessories

### Mounting Kits



**AM-312**  
Pole Mount Adapter



**AM-412**  
Corner Mount Adapter

### Cabinet



**AT-CAB-001**  
Cabinet, IP66, IK10



**AT-SUN-001**  
Sunshield



**AT-SWH-000**  
Power Safety Kit



**AT-PSP-001**  
Surge Protector



**AW-IHT-0100**  
Industrial Gigabit 30W  
PoE Injector

OR



**AW-IHT-0200**  
Industrial 1xGE 30W PoE  
+ 1xGE SFP PoE Switch



**HLG-80H-48**  
Industrial 48VDC/80W  
Power Supply



### PoE Kit/Power Adapter

#### 24VAC



**AA-341**  
AC 24V 3.5A Power Adapter

#### 30W PoE

##### Outdoor PoE Switch



**AW-FET-053C-120**  
4xFE PoE + 1xFE UTP  
Unmanaged PoE Switch, 120W



**AW-FGT-103C-250**  
8xFE PoE + 2xGE Combo  
Unmanaged PoE Switch, 240W



**AW-GET-083A-120**  
4xGE PoE + 2xGE UTP +  
2xGE SFP  
Unmanaged PoE Switch, 120W



**AW-GET-086A-120**  
4xGE PoE + 2xGE UTP +  
2xGE SFP  
VivoCam L2+ Managed PoE  
Switch, 120W



**AW-GET-126A-240**  
8xGE PoE + 4xSFP  
VivoCam L2+ Managed PoE  
Switch, 240W

##### indoor



**AP-GIC-010A-030**  
30W PoE Injector



**AW-GEV-267A-370**  
VivoCam L2+ Managed 24xGE PoE + 2xGE Combo Switch



**AW-FGT-260C-380**  
Unmanaged 24xFE PoE + 2xGE Combo Switch