



## IP Camera AM-SM4060-MMR5 5MP Ultra low lux Motorized Smart IVA WDR IP Bullet Camera



**DARK WARRIOR**  
STAR LIGHT

### Dark Warrior Starlight Series IP Camera

Designed to work under Ultra Low Light illumination to Give Colour Picture Quality

Superior Engineering Design & Sensational Image Quality

## AM-SM4060-MMR5 5MP Ultra low lux Motorized Smart IVA WDR IP Bullet Camera



VIDEO ANALYTICS



H.265 VIDEO+ COMPRESSION



SUPER WDR



REGION OF INTEREST



12VDC/ PoE 802.af



AUDIO IN/OUT



VOLTAGE PROTECTION



Local Storage



AUDIO IN/OUT



IP67 Waterproof

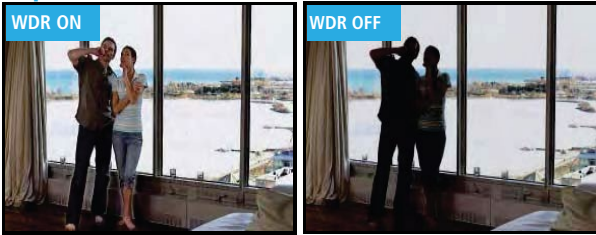
### Features :

- UltraHD 5MP resolution 2592(h) x 1920(v) at 20fps and 30fps at 4MP/2MP, etc.
- 1/2.8" Ultra low lux progressive scan CMOS sensor
- Powerful H.265+ Hardware compression along With H.264, MJPEG
- Motorized 2.8 ~ 12MM auto focus varifocal Lens, Controlled remotely through IE/CMS/NVR
- Smart more than 10 IVA functions, Supports 120dB WDR and 3DNR to night vision image enhancement
- Triple streaming, Triple compression, Variable/Constant bitrate and frame rate
- Two-way Intercom by Audio input and output, Third party alarm Integration by Alarm input and output
- Supports offline storage by microSD card 128gb(card optional)
- ANR(automatic network replenishment) to support offline network storage data(SD Card/USB) videos automatically download to NVR hard drive when network re-established
- ROI(region of interest) technology can save more than 25% of bit rate so it increases the storage period
- High intensity ExIR up to 50Mtrs. night vision, TDN vision by dual filter(ICR) for all 24/7 surveillance
- Ultra low lux color image at 0.002Lux, B&W 0.001Lux and 0Lux at IR On
- Smart IR function works when object/person is close to camera. It controls IR to get clear picture
- Software compatibility with icrys series 256Ch CMS(opt. 700Ch) and any third party Onvif VMS/CMS software
- P2P secure cloud monitoring on iOS/Android handsets(through NVR live/playback/audio and control)
- Built in uni/multicast streaming to support multiple user logging at same time
- Wide range network protocol TCP/UDP/FTP/SMTP/uPNP/RTSP/RTP/HTTP & many more
- Camera settings for In/Outdoor mode, WDR, ANPR and many more
- Various functions such as WDR, Day&Night, BLC/HLC, AGC, White balance, Shutter speed, In/Outdoor, etc.
- OSD menu control switch, Composite video output(optional)
- Wide range White balance setup for auto, manual, warm, natural, lock and many more
- OSD in multiple color, naming & position, Privacy, Motion detection
- Latest ONVIF S profile compliance, Email notification, Manual & Schedule snapshot
- Easy, fast response & friendly graphical user interface, Advanced encryption secure access
- Redundant power supported by 12VDC & PoE(power over ethernet) with 802.3af standard
- Built in TVS protection 6000V & lightning/surge Power(2000V), RJ45(1000V)
- Waterproof IP67 metal housing that supports wall/ceiling mounts included 3 Axis Bracket


### Darkwarrior Starlight IP Camera Night Vision



Super WDR



Remote Focus Motorized Control Lens



Remote Auto Focus Controlling Motorized lens technology and auto sets the focus & iris position for better picture quality in all focusing points and conditions.

Intelligent Video Analytics :



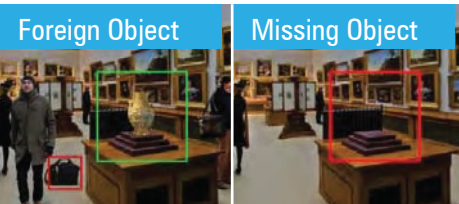
**Virtual Fence**  
With a virtual fence set alongside a railway track, freeway hard shoulder, building perimeter or around a temporarily parked asset for example, an alert is generated when that fence is breached. Since the system "understands" direction, alarm discrimination based on direction of approach is made possible.



**Double Trip Wire**  
The application detects moving objects that cross a two trip line, making it possible to automatically trigger an event. Ideal for illegal turn or traffic flow (vehicles or people) and specify the minimum to maximum time intervals or when the person or an object enters in unauthorized zone and crosses, the both virtual lines trigger an event.



**Perimeter**  
The application detect direction of movement can be defined in any direction of the zone movement or moving into zone or moving out to zone. Ideal for Security Zone, Restricted area, Valuable item Storage Area & Many More.



**Foreign Object**: The application Detects object abandoned/left behind/ Suspicious Objects Left in Pre-defined Area. It triggers an event. Ideal for Public Transports, Museums, Art Galleries & Public Places  
**Missing** : The application detects when a particular object was moved or removed from the desired drawn Virtual area, it trigger an event. Ideal for Museums, Warehouse, Art Gallery, Jewelry showroom.



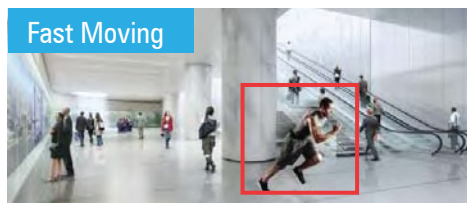
**Crowd**  
The application estimates the density of people in pre-defined area, once the density crosses a certain limits or suddenly group of a people enter into in the pre-defined area, it triggers an event. Ideal for Retailers, Shopping Malls, Waiting Areas, Hospitals, Parking Zones, Silent Zones.



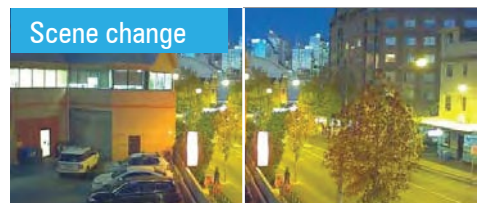
**Loitering**  
If somebody enters the marked area and stays there for a certain period of time, the alarm is automatically triggered. Ideal for Public areas, Border Fences, Buildings, Government Restricted Zone, Banks, Parking Areas.



**Parking**  
The application detects illegal parking with pre-defined restricted zones, speed limit settings.  
Ideal for VIP parking Zone, No Parking Zone, Special Allocated Parking Zone, Parliament House.



**Fast Moving**  
The application triggers an alarm when the person runs in a not allowing Running pre-defined Zone.  
Ideal for Temple, Hallways lobbies, Platforms Walking Zone, Airports Runways.



**Scene change**  
The application trigger an alarm if the camera Rotated/ Manipulation / Direction Shifted from the user-selected Viewing direction or camera lens is covered by some bag or cloths, Spray Painting, Video Tamper.

More than **10 IVA Functions** are available

## Technical Specifications

Model No	AM-SM4060-MMR5
<b>Camera Specification</b>	
Sensor type	1/2.8" Ultra low lux Exmor CMOS sensor
Lux Level(illumination)	Color 0.002 Lux, B/W 0.001Lux @(F1.2, AGC ON), 0Lux @ IR On
Shutter speed control	Auto/Manual, 1/2s ~ 1/100,000s
Gain control(AGC)	Yes
Lens	2.8 ~ 12MM motorized lens
Focus control	Auto focus, One-key, Manual
ICR	Dual filter ICR
IR distance	up to 50mtrs., Smart IR control, IR LED power adjustable
<b>On Screen Display</b>	
WDR	120dB, Auto/Manual adjustable
Day/Night	Auto(Outside/Inside), Color, B/W
Digital noise reduction	3DNR (Close/Ordinary/Expert)
Light compensation	BLC Off/On, 1 Area, Customize design, HLC Off/On adjustable
White balance	Auto/Manual/Lock/Nature/Sunshine/Day Light/Warm Light
Other functions	Smart Defog control, EIS(Image Stabilizer), Flip control, Privacy masking
Motion detection	Yes, Zones :396(22x18), Sensitivity level 1~ 100
Image control	Brightness, Contrast, Sharpness, Saturation
OSD display	16×16,32×32,24×24,48×48,64×64 character size 5 area arrangement @ Time/Date/Week/Character/PTZ angle
<b>Compression/Video/Audio</b>	
Video compression	H.265+, H.265, H.264, MJPEG, H.264 Main/High/Baseline profile
Video resolution	5MP(1944P,1920P), 4MP(1520P)/3MP/2MP/1.3MP/1MP/D1/2CIF/CIF/VGA
Main stream	5MP 2592×1944, 2560×1920, 4MP(2560x1520)/1080P(1920x1080)/960P(1280x960)/720P(1280x720)/D1(704x576)
Second stream	D1(704*576)/2CIF(704x288)/CIF(352x288)/QCIF(172x144)
Third stream	CIF(352x288)/QCIF(172x144)
Record & Live frame rate	Selectable 18 & 20fps at 5MP, 25fps at 4MP/3MP/2MP/1.3MP/1MP, second stream
Bit Rate	32Kbps ~ 16Mbps, VBR/CBR, I-Frame interval
Audio compression & bitrate	G.711/G.726/ADPCM & 8K~48Kbps
<b>Video Analysis</b>	
Intelligent video analysis	Crowd detection/Tripwire/Double tripwire/Perimeter/Missing and Foreign object/Fast Moving/
Intelligent alarm	Loitering/Parking/Blur image/Scene change/Audio & Video abnormal detection
Alarm & IVA trigger	Motion detection/Video loss/Video blind/Port alarm/IP & MAC conflict detection
Corridor control	On-screen alerts/PTZ trigger/Link out/E-MAIL/FTP upload/Pre-Post record
Region of Interest(ROI)	Yes(supported format 16:9, 9:16)
<b>Network, Storage, Interface</b>	
Protocol	4 Area
Pre & Post recording	TCP,UDP,HTTP,802.1x,FTP,SMTP,UPnP,Multicast,DNS,DDNS,NTP,RTSP,DHCP,PPPoE,SNMP
Storage function	Pre : 5 to 15sec, Post : 10 to 60 sec
Network storage	ANR(auto download in NVR), Manual & Alarm recording
LAN port	FTP(pre & post upload)
Storage	1x Port RJ-45, 10M/100M ethernet
Audio	Micro SD/SDHC/SDXC slot(256Gb)
Alarm	1Ch in, 1Ch out
Other ports	2Ch in, 1Ch out
	RS-485

## Technical Specifications

Model No.	AM-SM4060-MMR5
<b>Software Support</b>	
Onvif	Yes, Profile S
CMS software	iCRYS Series, up to 256CH(IP+NVR+Matrix)
3rd Party VMS/NVR /CMS	Onvif/SDK/CGI
Mobile	Android /iOS through NVR, P2P cloud support
User login	8 User / 4 level of rights, Simultaneous login <7 User client
Snap shots	Schedule, Link with FTP or Email
Encryption	Off/AES
<b>General</b>	
Power supply	DC 12V ±15% & PoE (802.3af)
Power consumption	<5W @ IR Off, <10W @ IR On, ICR switching @ 12W
Voltage protection	TVS 6000V, Lightning/Surge 2000V(power) 1000V(RJ45)
IP & Vandal protection	IP67, IK10 graded enclosure(excluding glass)
Reset switch	Yes
Operating temp. & humidity	-30°C ~ 60°C & 0% ~ 95% RH
Enclosure	Metal housing, Built-in 3 axis bracket
Weight (g) & Dimension	<1.5Kg camera, 265mm(L) X 95mm(W) X 85mm(H), Ø 105mm(D)

### Dimension :

