# MEGAPIX AI ANPR

Next-generation video analytics



AI-powered high-speed IP cameras with Plate, Vehicle Type, Make, Model and Color Recognition







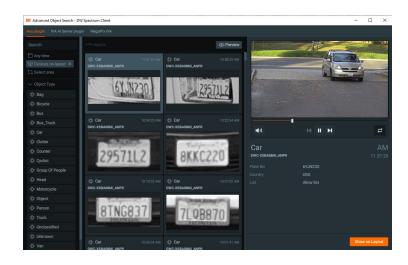
# MEGAPIX AI ANPR

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Automatic number-plate recognition (ANPR) uses optical character recognition on images to read vehicle license plates to store the images captured by the cameras as well as the text from the license plate. DW's ANPR and MMCR (Make, Model, Color) cameras are ideal for access control and city-wide surveillance solutions.

#### **ANPR Cameras**

ANPR cameras can read, document and search vehicle license plates in any lighting conditions. DW's ANPR cameras can also identify the vehicle type. The camera detects and extracts a license plate's characters in milliseconds at up to 75mph with up to 95% accuracy, converting the images to usable digital data that can be searched and mined for analytics, patterns and access reports.





#### **MMCR Cameras**

The Ai-based Make, Model and Color solution can run on DW's X series Ai cameras, using MMCR to classify vehicles, make, model and color across numerous brands. The ANPR is included with MMCR in a single camera, pre-installed and ready to go out of the box, with seamless management using the DW Spectrum IPVMS client.





# Native integration and management via the DW Spectrum IPVMS client

DW's Ai ANPR and MMCR solutions are fully integrated with DW Spectrum client for a single and simple platform to manage, host and search the camera's database of license plates, match them across multiple access points or monitor vehicle theft. DW Spectrum IPVMS, ANPR, and MMCR Ai technology are a one-stop solution to maximize operators' efficiency, empowering them to turn video into actionable intelligence.







# Image enhancement features for challenging lighting

DW's ANPR and MMCR cameras are equipped with the latest image enhancement capabilities, reducing glare and harsh light that can interfere with the license plate's details. The results are clean and clear images with 95% character recognition accuracy.

# High-resolution image with 8x optical zoom

DW's Ai cameras deliver 5MP images in realtime 30fps to accurately identify fast-moving vehicles and capture license plates. The cameras also supports up to 8x optical zoom, ideal for narrow field-of-view applications that focus on the vehicles' license plates.



# ANPR and MMCR for Access Control Solutions

ANPR and MMCR cameras can detect and enforce vehicles' access to parking lots, dock stations and other restricted areas. Identify vehicles violating parking guidelines or entering areas without authority. The ANPR and MMCR cameras can trigger events and alert operators or law enforcement, sharing relevant details for a speedy response.





# ANPR and MMCR for Logistics Solutions

ANPR and MMCR's number plate reading technology can reduce costs for transportation and logistics companies and make fleet management more effective. ANPR and MMCR cameras can track shipping vehicles leaving and arriving in facilities, tracking and updating the progress of shipping goods until the delivery reaches its destination.

# ANPR and MMCR for Smart City Solutions

ANPR and MMCR IP cameras can provide operators with insights into road usage, traffic flow trends and control access to restricted areas with an integrated database search in DW Spectrum that allows for partial number plates search and reports. ANPR and MMCR cameras installed at entrance and exit points can track departure times for public transportation, offering smart cities and passengers live updates on schedules, possible delays or unexpected incidents. The cameras are a great enhancement tool to access control solutions and parking lot management.







### Where are ANPR and MMCR Cameras Used?



**Parking Lot and Garages** 



**Drive-throughs** 



**Toll Gates and Booths** 



Car Wash



**Monitored Entry Stations and Gates** 



**Restricted Areas** 



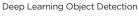
**Stop and Go Traffic** 



**Tracking a Known Suspect's Vehicle** 

DW Ai solutions include all the Intelligent Video Analytics and advanced Video Content Analysis detection capabilities of the Ai engine. In addition, DW's Ai empowers users with deep learning objects and people tracking and color filters.







Logical Rules Counting Lines



Enter

Exit



Direction



Counting





ng Detection Zones Metadata



Intrusion



Tailgating



Appear



Disappear



Stopped



Line Crossing



Tampe

## Higher Resolution = More Pixels, More forensic details

DW's technology delivers high-resolution crystal-clear images, making more minor details appear clear and sharp when zooming into the scene.









IR light reflects from object, reducing visibility



Smart IR™ cameras distribute the IR light evenly in the FoV

### Smart IR™

Smart  $IR^{\mathsf{TM}}$  adjusts the image for IR cameras to prevent excessive illumination.

## True Wide Dynamic Range (WDR)

Cameras with true WDR technology have advanced sensors that can deliver clear images in a wider range of lighting.



Image is under exposed



Image is over exposed



WDR image is clear and balanced



Main stream for recording.



Secondary stream for live viewing.

# **Simultaneous dual-streams**

Use the camera's dual-stream feature to manage traffic and bandwidth on your network, with a high-resolution stream for recording and a standard-resolution stream for live monitoring.



# Smart DNR™ 3D digital noise reduction

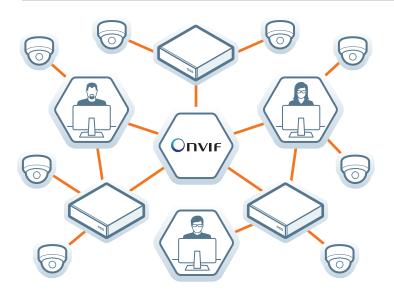
Use DW's exclusive noise reduction technology to produce clearer color and monochromatic video in low light without adding visual lag or ghost effects.







Smart 3D DNR clarifies digital noise



### **ONVIF®** Conformant

DW's ONVIF conformant IP products allow you to bring our robust solutions to any surveillance system with other ONVIF components, creating a unique solution to your specific needs.



#### **IP67-Rated**

IP67 rating has protection against dust and water up to 3 feet.



#### **IK10 Impact Resistant**

IK10 rating protects against impact equivalent to 10lbs mass dropped from 15.75 inches.



### **5 Year Warranty**

All DW cameras come with an unbeatable 5-year warranty.



# NDAA/TAA





## **NDAA and TAA Compliant**

DW IP cameras, analog cameras, NVRs, DVRs, network devices and management software sold and distributed worldwide are designed and developed in U.S.A. and Korea, with manufacturing in Korea, Vietnam and Taiwan.

Most DW products qualify for GSA Schedule Contracts and other government opportunities because they are TAA and NDAA compliant.

#### ANPR camera

#### MMCR camera





| PAR                 | T NUMBER                      | DWC-XSBA05MiL   | DWC-XSBA05MiM  |
|---------------------|-------------------------------|---|--|
| Image               | Image sensor                  | 5MP 1/2.8" Star-Light Plus CMOS sensor  |  |
|                     | Total pixels                  | 2704(H) X 2104(V)   |  |
|                     | Minimum scene<br>illumination | 0.1 lux (color)   |  |
|                     |                               | 0 lux (B/W)   |  |
| Audio input/ output |                               | 1 line in, 1 line out   |  |
| Lens                | Focal length                  | 6-50mm  |  |
|                     | Lens type                     | Vari-focal p-iris lens with motorized zoom and auto-focus   |  |
|                     | IR distance                   | 130ft range   |  |
|                     | Angle of view                 | 6.9°-40.8°  |  |
|                     | Digital noise reduction (DNR) | Smart DNR™ 3D digital noise reduction   |  |
|                     | Wide dynamic range            | True WDR  |  |
|                     | Day and night                 | True D/N  |  |
|                     | Motion detection              | Yes   |  |
| Operational         | Privacy zones                 | 16 privacy masks  |  |
|                     | Deep learning<br>analytics    | Deep learning object tracking and automatic number plate recognition (ANPR)   | Deep learning object tracking, automatic number plate recognition (ANPR), make, model and color (MMCR) |
|                     | Analytics filters             | Detection zones and lines, logical rules, tamper, intrusion, counting, counting lines, appear, disappear, stopped, enter, exit, tailgating, dwell, logical rules, direction, metadata |  |
|                     | Alarm input                   | 1 alarm input   |  |
|                     | Alarm output                  | 1 alarm output  |  |
| Network             | Video compression type        | H.265, H.264, MJPEG   |  |
|                     | Frame rate                    | 30fps at all resolutions  |  |
|                     | Streaming capability          | Simultaneous dual-streaming   |  |
|                     | Onboard storage               | Micro SD / SDHC / SDXC  |  |
|                     | Video management software     | DW Spectrum IPVMS, plus other ONVIF conformant VMS  |  |
| Environmental       | Housing                       | Bullet  |  |
|                     | Operating temperature         | -40°F ~ 122°F (-40°C ~ 50°C)  |  |
|                     | IP rating                     | IP67-rated  |  |
|                     | IK rating                     | IK 10-rated impact-resistant  |  |
|                     | Other certifications          | FCC, CE, UL-listed, ROHS, NDAA compliant, TAA compliant   |  |
| Electrical          | Power requirements            | DC12V, PoE IEEE 802.3at PoE+ Class4 (Adapter not included)  |  |
|                     | Power consumption             | DC12V: 13.2W, 1.1A, PoE: 14.4W, 0.3A  |  |
| Mechanical          | Dimensions                    | 12.2" × 3.81"   |  |
|                     |                               |   |  |

### Contact us:



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uilt for Users.





