

Edge-based Ai engine with real-time object classification for intelligent video solutions





MEGAPIX A

Next-generation video analytics

Why choose analytics on the edge?

License-free intelligence video analytics are included with the cameras, offering customizable detection zones and event-based alarms, reducing false alarms and increasing overall efficiency at no extra cost.





Lightning Fast Analytics

DW's edge-Ai engine places the processing power as close to the source as possible, applying the analytics to the video on the spot rather than once it arrives on the server. Valuable insights done in a fraction of a second will reduce the burden on the operators to sift through data, speeding up response time, increasing overall efficiency.



Reduce Network and Storage Burden

Deploying powerful analytics at the edge means that only the most relevant information is sent across the network, reducing the burden on bandwidth and storage. Deploying edge-side analytics allows the video to be analyzed in high-quality. In contrast, server-side analytics have to work with often compressed and re-compressed video, which may impact the quality of the video and details.

Easy Setup (No Manual Calibration)

Choose what to detect and where with a userfriendly and straightforward UI, set up multiple scenarios specific to your monitoring needs without complex calibration.



Future-Proof Solution

A DW Ai analytics provides scalability and optimization of resources across a system. New analytics can be added to your site, making your system future-proof without infrastructure expansion.



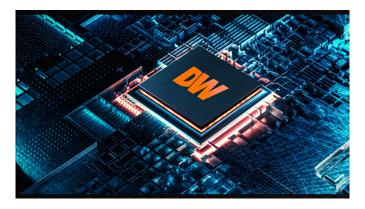






Ambarella CV22/25 Chip with CVflow®

Ambarella's CV22 and CV25 chips combine image processing, real-time 30fps up to 4K video and CVflow® architecture to provide the deep neural network (DNN) processing required for the next generation of intelligent IP cameras.



Optimized Performance at the Edge

MEGApix Ai's analytics engine is designed for the edge, working on the camera side to substantially reduce bandwidth consumption and accelerate response times with overall improved performance.



Object Classification

DW's Ai software processes video streams to detect and classify every object appearing in the detection zone. Our Deep Learning engines perform object detection (DL Object tracker), automatically classifying the objects in the scene: people, cyclists, cars, buses and vans, trucks, motorcycles, bicycles and bags.



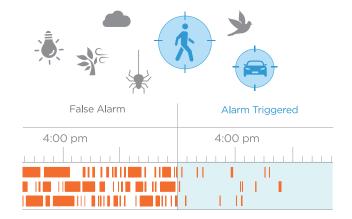
Trucks



Cars



Humans



Reduce False Alarms

MEGApix Ai accurately categorizes moving objects and people, distinguishing them from environmental items such as spiders, shaking shadows and moving lights. The result is a reduction in false alarm rates, saving storage and enabling more efficient monitoring.

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







Detection zones

Create up to 40 detection zones for specific alarm conditions.



Tamper

Detect camera tampering triggers an alarm.



Metadata

Export event information, tracked objects, bounding box, history and attributes.



Appear

Start tracking people or objects in the detection zone without crossing into the zone.



Disappear

Stop tracking people or objects in the detection zone without crossing out of the zone.



Stopped

Detect people or objects stopped in the detection zone for a set duration.



Enter

Detect people or objects crossing the detection zone's border from outside the zone.



Exit

Detect people or objects crossing the detection zone's border from inside the zone.



Counting

Provide a real-time count of targets in a detection zone



Counting line

Calculate the number of people or objects crossing the detection line.



Intrusion

Detect people or objects crossing into the detection zone.



Direction

Start tracking people or objects in the detection zone without crossing into the zone.



Line crossing

Detect people or objects crossing the detection line.



Tailgating

Detect a person or object crossing the detection line within a set period from the previous person or objects.



Logic rules

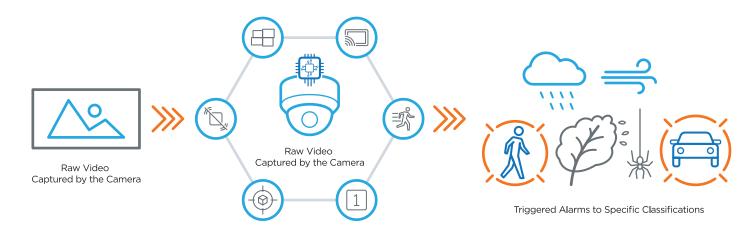
Combine multiple rules to create specific conditions for events.





Logical Rules

Blackjack Ai servers combine multiple zones and virtual tripwires to create elaborate, multiple trigger point rules for a greater event detection level.



NDAA/TAA Compliant

DW products sold and distributed worldwide are designed and developed in the 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.









Seamless Integration with DW Spectrum IPVMS

Ai analytics are natively integrated with DW Spectrum IPVMS for easy configuration, realtime alerts and automatic notifications.





H.265 codec

Deliver 25% to 50% better Bring our robust solutions data compression while



ONVIF® Conformant

to any surveillance system maintaining video quality. for a truly unique solution.



Smart 3D DNR™

Reduces digital noise, visual lag and ghost effects to produce clearer video in low light.



5 Year Warranty

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



ANPR and MMCR IP Cameras

DW's Automatic number-plate recognition(ANPR) IP cameras can detect and extract numbers and letters in license plates at up to 45mph at 95% accuracy, converting the pixels to usable digital data.

Combine DW's ANPR technology with an MMCR license to accurately extract a vehicle's attributes, such as make, model, color, and type, in addition to the vehicle's license plate.





Dual-Sensor Dome Camera

DW's dual-sensor IP camera provides two sensors that can be positioned and configured independently, allowing flexible, multi-directional video surveillance that is ideal for monitoring hallways, train stations and other narrow view environments.

White light LEDs built-in

Create deterrence and provide crystal-clear images in color without the need for external illumination or the potential loss of color and detail from B/W images.









Star-Light Plus™ Color in Near-Total Darkness Technology

Cameras equipped with a Star-Light Plus[™] sensor provide crisp, clear B/W and color images even in near complete darkness.



Monochrome and color image in near-total darkness.

True Wide Dynamic Range (WDR)

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



Details are visible in over and under exposed areas.

Smart IR™

Prevent excessive illumination on objects that are in the front of the scene while offering a clear B/W image without loss of detail.



IR light reflects from object, reducing visibility.



Smart IR[™] distribute the IR light evenly in the FoV.

Higher Resolution = More Pixels, More Forensic Details

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









Details are lost in lower resolution zoom.





Models and specifications*:

















MODEL	4K vandal dome	4K bullet	10MP dual-sensor dome (*Ai on 1ch only)		5MP bullet	5MP turret, white light LEDs	5MP bullet, ANPR	5MP bullet, ANPR, MMCR
SKU	DWC-XSDE08Mi	DWC-XSBA08Mi	DWC-PDS10Wi28A	DWC-XSBE05Li	DWC-XSBE05Mi	DWC-XSTD05MF	DWC-XSBA05MiL	DWC-XSBA05MiM
Image sensor	4K 1/2.8" Star-Light Plus™ sensor		2x 1/2.8" 5.69M Star- Light Plus™ sensors	1/2.8" 5.17M Star-Light Plus™ sensor	1/2.8" 5.17M Star-Light Plus™ sensor		1/2.8" 5.69MP Star-Light Plus™ sensor	
Total pixels	3864(H) X 2228(V)		2x 2704(H) X 2104(V)	2608(H) X 1984(V)	2608(H) X 1984(V)		2704(H) X 2104(V)	
Minimum scene illumination	0.09 lux (color)		0.13 lux (color)	0.08 lux (color)	0.04 lux (color)	0.03 lux (color)	0.1 lux (color)	0.1 lux (color)
	0 lux (B/W)		0 lux (B/W)	0 lux (B/W)	0 lux (B/W)	0 lux (white light)	0 lux (B/W)	0 lux (B/W)
Color temperature						Warm light, 3300K		
WL wavelength (lumen)						200lm		
Focal length	2.7~13	.5mm	2x 2.8mm	5 ~50mm	2.7~13.5mm	2.7~12mm	6~50mm	6~50mm
Lens type	Vari-focal lens		Fixed lens	Long range vari-focal lens	Vari-focal lens			
IR/wahite light distance	100ft IR range	140ft IR range	60ft IR range	120ft IR range	120ft IR range	90ft range white light	130ft IR range	130ft IR range
Audio input/ output	1 microphone built- in/1 output	1 (1.0Vms, 3K ohm) input/1 output	1 microphone built- in/1 output	1 Line (1.0Vms, 3K ohm) input/1 Line output	1 Line (1.0Vms, 3K ohm) input/1 Line output	1 microphone built-in/ 1 speaker built-in	1 (1.0Vms, 3K ohm) input/1 output	1 (1.0Vms, 3K ohm) input/1 output
Alarm input/ output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output
Deep learning analytics	Deep Learning object tracking							
Analytics filters	Zones and lines, tamper, metadata, intrusion, line crossing, counting, counting lines, appear, disappear, stopped, enter, exit, direction, tailgating, dwell, logical rules							
ANPR/MMCR							Captures and reads vehicle license plates (ANPR)	Captures and reads vehicle license plates (ANPR), Make, Model and Color (MMCR)
Housing	Vandal dome	Bullet	Dual-sensor dome	Bullet	Bullet	Turret	Bullet	Bullet
Operating temperature	-4°F ~ 122°F (-20°C ~ 50°C)	-40°F ~ 122°F (-40°C ~ 50°C)	-4°F - 122°F (-20°C - 50°C)			-40°F ~ 122°F (-40°C ~ 50°C)		
Other certifications	CE, FCC, UL, NDAA, TAA							
Dimensions	4.92" x 3.62" (125 x 92mm)	12.2" x 3.81" (310 x 97mm)	5.47" x 3.12" (139 x 79.5mm)	7.77" x 3.38" 4.92" x 4.79" (197.5 x 86mm) (125 x 121.7 mm		4.92" x 4.79" (125 x 121.7 mm)	12.2" x 3.81" (310 x 97mm)	

* See product datasheets for full specifications.

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Built for Users.







