
MEGAPIX[®] Ai[™]

Next-generation video analytics



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

NDAA/TAA
COMPLIANT PRODUCT



Stay current at:
[Digital-Watchdog.com](https://www.Digital-Watchdog.com)

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 efficiency and reducing overall cost.



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 Calibration)

DW's Ai allows operators to choose what to detect and where; with a user-friendly and straightforward UI, users can set up multiple scenarios specific to their monitoring needs without complex calibration.



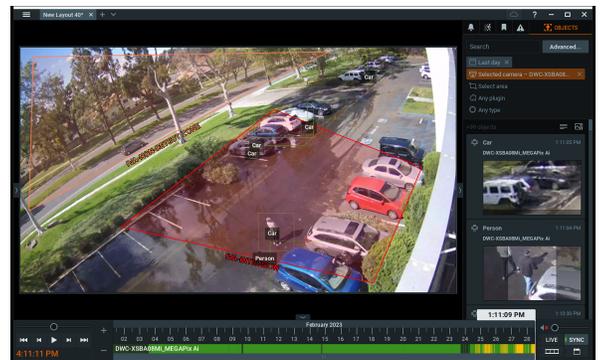
Ambarella CV22 Chip with CVflow®

Ambarella's CV22S chip combines image processing, real-time 30fps 4K video encoding 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

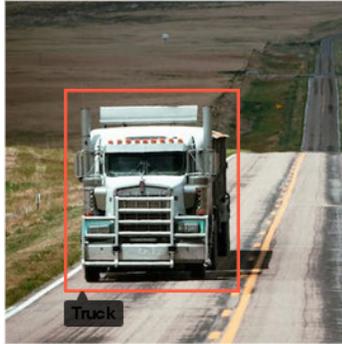
MEGApix Ai's analytics engine is specially designed for the edge, working on the camera side to substantially reduce bandwidth consumption and accelerate response times with overall improved performance.



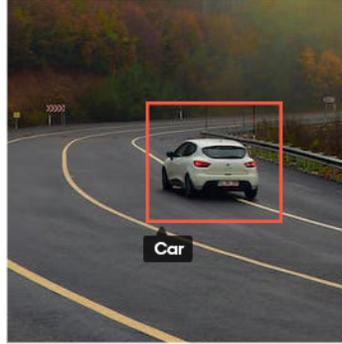


Object Classification

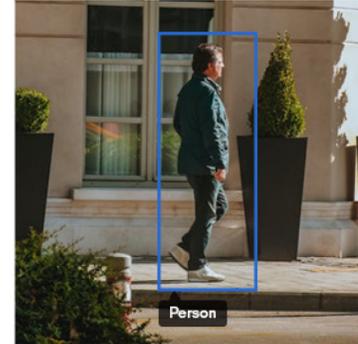
DW's Ai software processes video streams to detect and classify every object appearing in the detection zone. Our Deep Learning engines perform object detection (DL Object tracker), automatically classifying the objects in the scene: people, cyclists, cars, buses and vans, trucks, motorcycles, bicycles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



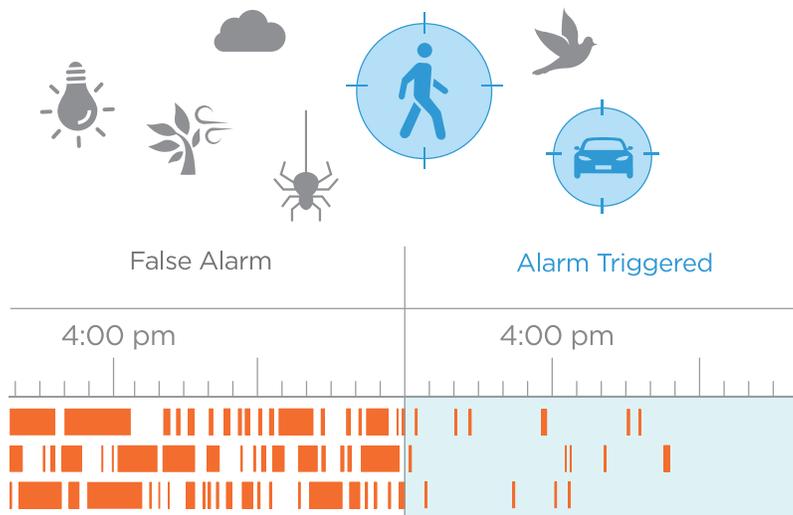
Trucks



Cars



Humans

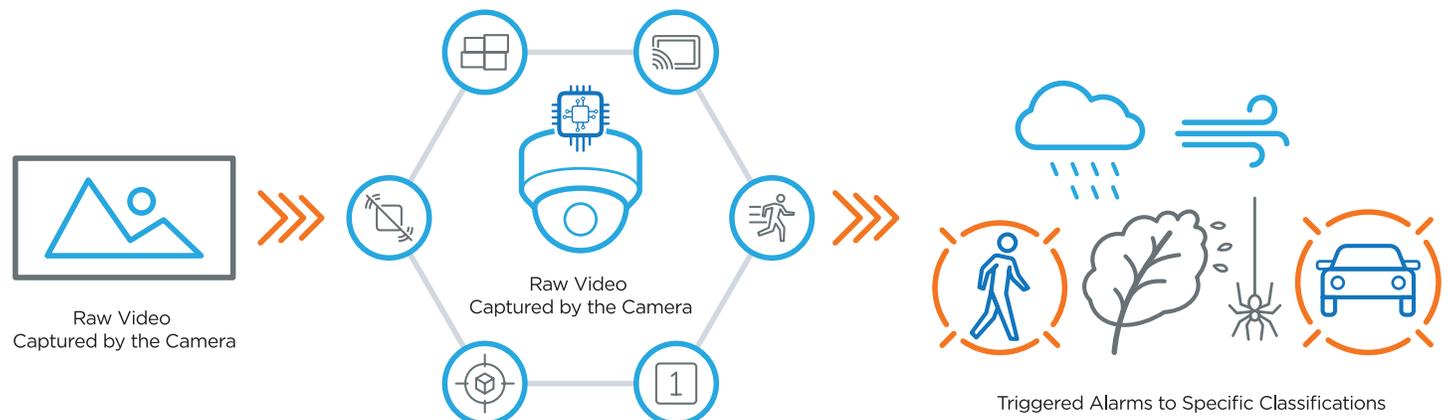


Reduce False Alarms

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.

Logical Rules

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





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.



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.

Seamless Integration with DW Spectrum IPVMS

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



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.



NDAA/TAA
COMPLIANT PRODUCT



Trade
Agreements
Act FAR 52.225-5



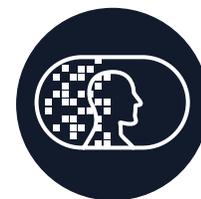
H.265 codec

Deliver 25% to 50% better data compression while maintaining video quality.



ONVIF® Conformant

Bring our robust solutions to any surveillance system for a truly unique solution.



Smart 3D DNR™

Smart Digital Noise Reduction (DNR) reduces digital noise, visual lag and ghost effects to produce clearer video in low light.



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.

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.



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 over exposed



Image is under exposed



WDR image is clear and balanced





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 images in near-total darkness



Color image details in near-total darkness.

Simultaneous dual-streams

Manage traffic and bandwidth on your network, with high-resolution stream for recording and standard-resolution stream for live monitoring.



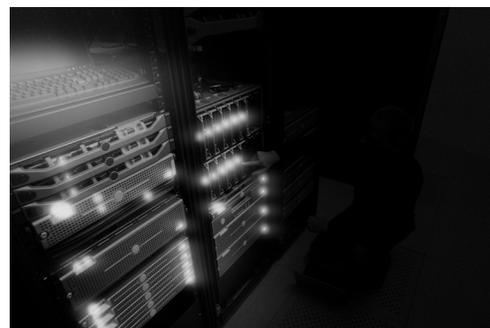
Main stream for recording.



Secondary stream for live viewing.

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™ cameras distribute the IR light evenly in the FoV



IP67-Rated

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



IK10 Impact Resistant

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



5 Year Warranty

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

Models and specifications*:

4K cameras



10MP dual-sensor camera



PART NUMBER		DWC-XSDE08Mi	DWC-XSBA08Mi	DWC-PDS10Wi28A (*Ai available on one channel only)
Image	Image sensor	4K 1/2.8" Star-Light Plus CMOS sensor		2x 5MP 1/2.8" Star-Light Plus CMOS
	Total pixels	3864(H) x 2228(V)		2x 2592(H) X 1944(V)
	Minimum scene illumination	0.09 lux (color) 0 lux (B/W)		0.13 lux (color) 0 lux (B/W)
Audio input/ output		1 line in, 1 line out		1 microphone built-in/1 output
Lens	Focal length	2.7-13.5mm		2x 2.8mm, F1.8
	Lens type	Vari-focal p-iris lens with motorized zoom and auto-focus		Fixed lens
	IR distance	100ft range	140ft range	50ft range
	Angle of view	33.1°-90.3°	33.1°-90.3°	102.4°
Operational	Alarm input	1 alarm input	1 alarm input	1 alarm input
	Alarm output	1 alarm output	1 alarm output	1 alarm output
	Onboard storage	Micro SD / SDHC / SDXC		
Environmental	Housing	Low-profile vandal dome	Bullet	Dual-sensor vandal dome
	Operating temperature	-4°F - 122°F (-20°C - 50°C)		-4°F - 122°F (-20°C - 50°C)
	Other certifications	FCC, CE, UL-listed, NDAA		FCC, CE, UL-listed, NDAA, TAA
Electrical	Power requirements	DC12V, PoE IEEE 802.3af Class3 (Adapter not included)	DC12V, PoE IEEE 802.3at PoE+ Class4 (Adapter not included)	DC12V, PoE IEEE 802.3af Class3 (Adapter not included)
	Power consumption	DC12V: 10.2W, 850mA PoE: 12.5W	DC12V: 13.2W, 1.1A PoE: 14.8W	DC12V: max 8.5W 708mA PoE: max 10.6W
Mechanical	Dimensions	4.92" x 3.62"	12.2" x 3.81"	5.47" x 3.12"

* See product datasheet for full specifications.

Contact us:



California Office
16220 Bloomfield Avenue
Cerritos, California USA 90703
Hours: 8:00am - 5:00pm PST.



Florida Office
5436 West Crenshaw Street
Tampa, Florida USA 33634
Hours: 8:30am - 5:30pm EST.

Phone (Toll-Free).....1.866.446.3595
 Fax.....1.813.888.9262
 Customer Service (U.S.).....1.866.446.3595
 Customer Service (International).....1.813.888.9555
 Customer Service (French).....1.514.360.1309
 Sales Email.....sales@digital-watchdog.com
 Tech Support Email.....technicalsupport@digital-watchdog.com



Increase sales and profitability. Sign up and become a DW Channel Partner today!

☎: 866.446.3595 ✉: sales@digital-watchdog.com 🌐: www.digital-watchdog.com

