MEGApix® Ai™

Next-generation video analytics

Non-AI | **MEGApix AI**

Vehicle · Person · Person

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

DW

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MEGAPIX Ai™

Next-generation video analytics

Ai INSIDE

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 user-friendly 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.

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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.
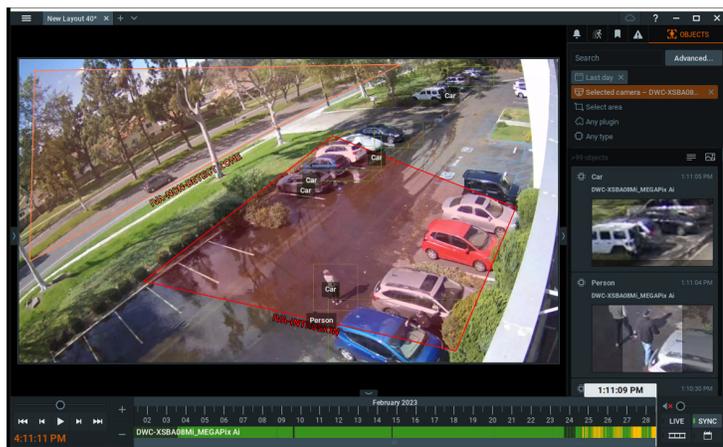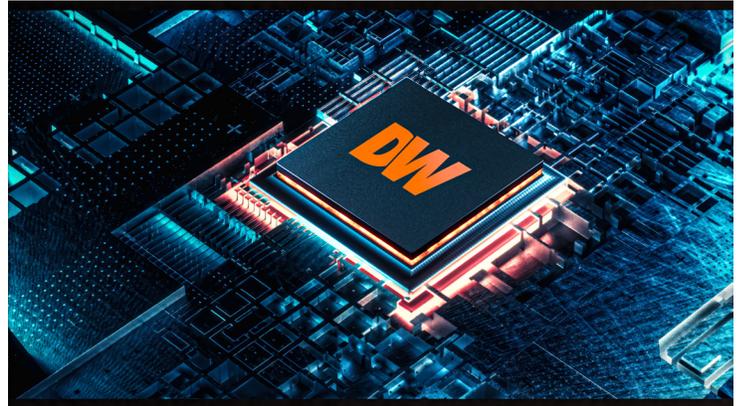

Optimized Performance at the Edge

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.
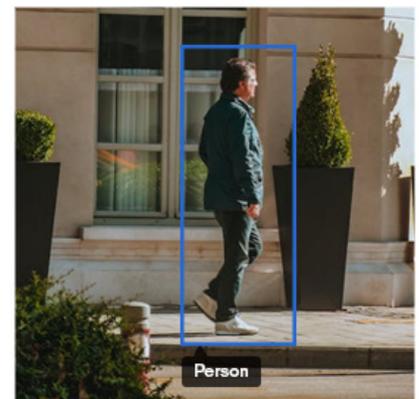
Object Classification

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
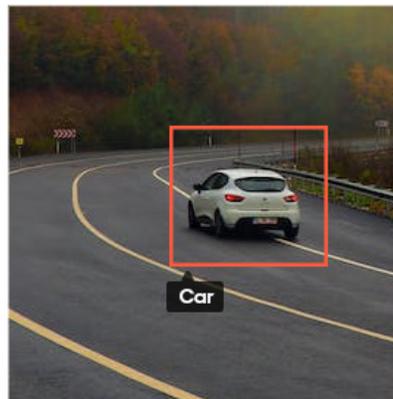
Cars

Humans

Ai Edge Analytics

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.

Dwell
Detect people or objects crossing into a detection zone and remaining past the set dwell time.
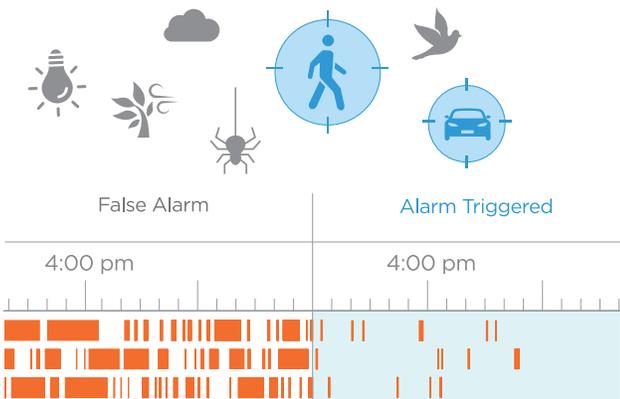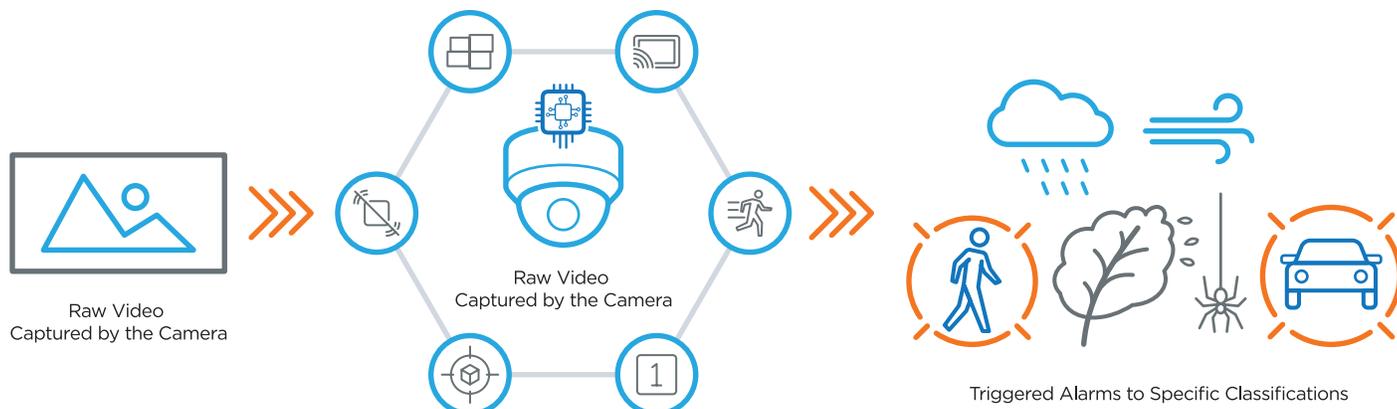
Logic rules
Combine multiple rules to create specific conditions for events.

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Ai INSIDE

Logical Rules

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

Raw Video
Captured by the Camera

Raw Video
Captured by the Camera

Triggered Alarms to Specific Classifications

False Alarm

Alarm Triggered

4:00 pm

4:00 pm

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.

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.

ANPR
Automated Number Plate Recognition

K50 1234

MMCR
Make, Brand, Color and Type Recognition

HYUNDAI   GRANDEUR

WHITE   CAR

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.

Hardware Built to Last

The DWC-XSBJ bullet and DWC-XSDJ dome cameras come with a junction box and converter plate included for an out-of-the-box solution that is easy to install and has everything you need in weather and vandal-resistant housing.
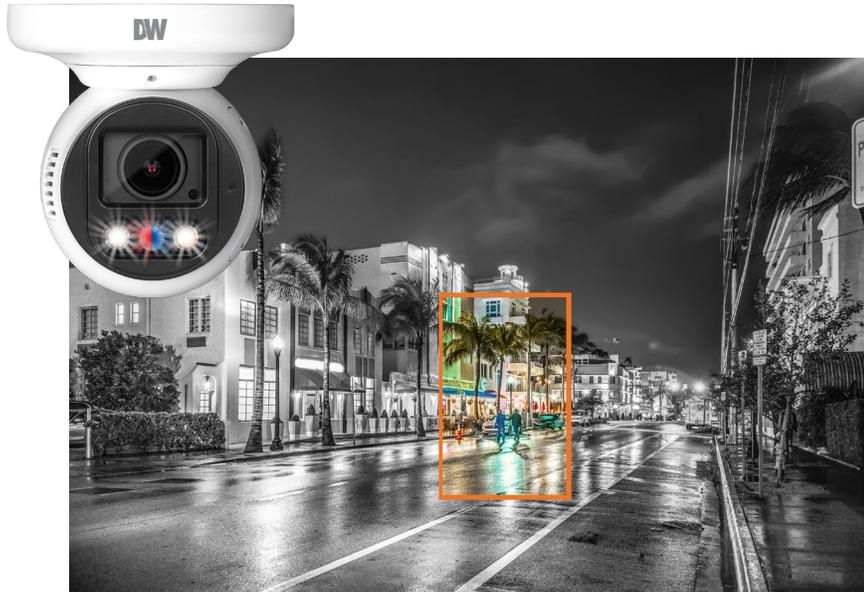
White light LEDs Built-in

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.

Ultimate All-in-One Deterrent Solution

DW's turret cameras come with white light LEDs, flashing alarm lights and built in speaker and microphone, making the camera an ideal complete solution, deterring crime and recording evidence.

QR Code Reader Plugin

QR code reader detects and registers codes in the FoV with green LED visual verification.

Split Glass Cover for no IR Reflection

The separate lens and IR LED glass covers reduce IR diffusion and reflection at night, normally associated with a single lens and IR cover.

Separate glass covers preventing IR reflection.

3 IR LEDs for up to 120' coverage.

PTZ Camera with Auto Tracking

DWC-XPZA is powered by AI-based auto tracking, which locks onto identified people or vehicles in a detection zone, even in low-light conditions and complex environments.

Extensive Zoom and Coverage

With a 40x optical zoom and 16x digital zoom, the camera can capture distant objects with clarity. The 360° endless panning and high-speed pan and tilt functions allow comprehensive coverage of large areas without blind spots.

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Ultra-wide single-sensor views

The ultra-wide view single-sensor bullet IP camera offers wide-area situational awareness and edge-to-edge image clarity without pixel loss, suitable for narrow corridor installations, with clear images as close as 19.5~23.5 inches from the camera.

Ultra Low-Profile Vandal Dome Cameras

The DWC-XSDA and DWC-XSDH hardware packs all the power and capabilities of DW's Ai™ into a small, discrete vandal housing. The camera, small enough to fit in the palm of your hand, is a great addition to any application that is looking for maximum surveillance power in a discrete installation.

Next Generation IR Technology

DW's new dome design places the IR LEDs separately from the lens and dome. The result is a clear B/W image in any lighting and weather conditions, with no IR reflection on the dome or IR hot spots.
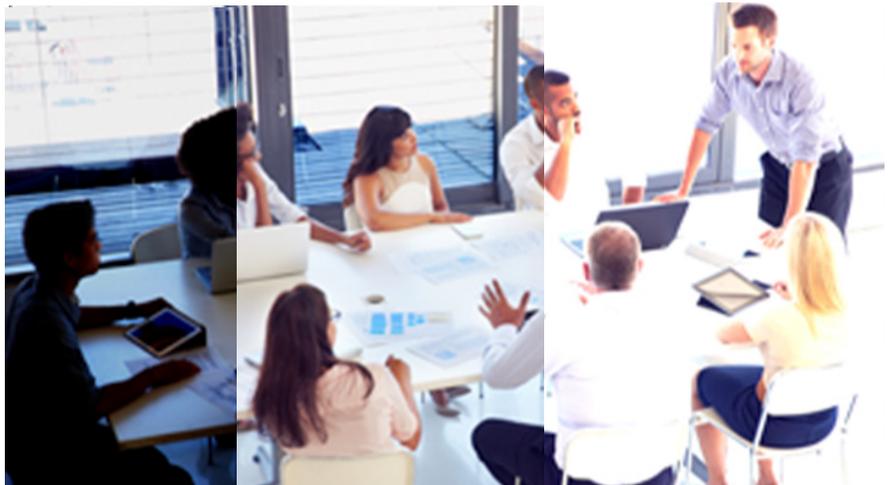
DW's new IR design delivers clear B/W images with no IR reflection

IR reflection and smudges cause image distortion

True Wide Dynamic Range (WDR)

Cameras with true WDR technology have advanced sensors that can deliver clear images in a wider range of lighting.
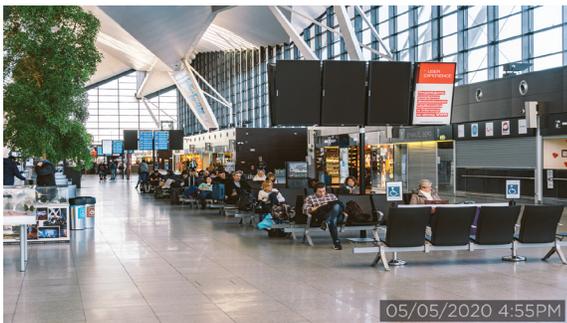
Star-Light Plus™ Color in Near-Total Darkness Technology

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

Simultaneous dual-streams

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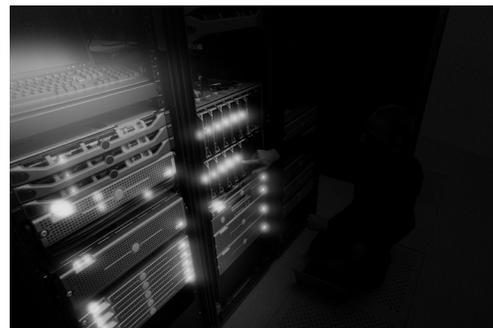

Main stream for recording.

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.

DW

4K

2.1MP

Higher Resolution = more pixels to zoom into.

Details are lost in lower resolution zoom.

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.

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

GSA

Trade
Agreements
Act FAR 52.225-5

H.265 codec
Deliver 25% to 50% better data compression while maintaining video quality.

Onvif
Conformant

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

5YEAR
Warranty

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

Models and specifications*:

MODEL	4K PTZ	3MP PTZ	4K bullet	4K bullet	4K bullet	4K vandal dome	4K vandal dome	10MP dual-sensor dome (*Ai on 1ch only)
SKU	DWC-XPZA08Mi	DWC-XPZA03Mi	DWC-XSBC08Bi	DWC-XSBA08Mi	DWC-XSBJ08Mi	DWC-XSDE08Mi	DWC-XSDJ08Mi	DWC-PDS10Wi28A
Image sensor	4K 1/1.8" Star-Light Plus™ sensor, 30fps	3MP 1/1.8" Star-Light Plus™ sensor, 60fps	4K 1/1.8" Star-Light Plus™ sensor, 30fps	4K 1/2.8" Star-Light Plus™ sensor, 30fps				2x 1/2.8" 5MP Star-Light Plus™ sensors, 30fps
Active pixels	2304 (H) x 1296(V)	3840 (H) x 2160(V)	3840(H) x 2160(V)					2x 2592(H) X 1944(V)
Focal length	6.5-260mm vari-focal lens		2.3mm fixed lens	2.7-13.5mm vari-focal lens				2x 2.8mm fixed lens
IR/white light distance	1184ft IR range		100ft IR range	140ft IR range	110ft IR range	100ft IR range	110ft IR range	60ft IR range
Audio input/output	1 input/1 output		1 input/1 output	1 (1.0Vms, 3K ohm) input/1 output	1 line input, 1 microphone built-in (1 at a time)/1 output	1 microphone built-in/1 output	1 line input, 1 microphone built-in (1 at a time)/1 output	1 microphone built-in/1 output
Alarm input/output	4x sensor input / 2x alarm output / 1x RS485 port		1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output	1 input/1 output
Specialty AI	Object tracking		---	---	---	---	---	---
Housing	High-speed PTZ dome		Wide lens bullet	Bullet	Bullet	Vandal dome	Vandal dome	Dual-sensor dome

MODEL	5MP vandal dome	5MP vandal dome	5MP bullet, long range lens	5MP bullet	5MP turret, white light LEDs	5MP turret, white light LEDs, QR code reader	5MP turret, vari-focal lens	5MP turret, fixed lens	5MP bullet, ANPR	5MP bullet, ANPR, MMCR
SKU	DWC-XSDA08Bi	DWC-XSDH05Mi	DWC-XSBE05Li	DWC-XSBE05Mi	DWC-XSTD05MF	DWC-XSTD05MFQ	DWC-XSTD05Mi	DWC-XSTD05Bi	DWC-XSBA05MiL	DWC-XSBA05MiM
Image sensor	5MP 1/2.8" Star-Light Plus™ sensor, 30fps								1/2.8" 5.69MP Star-Light Plus™ sensor	
Active pixels	2592(H) X 1944(V)								2592(H) X 1944(V)	
Focal length	2.8mm fixed lens	2.7-13.5mm vari-focal lens	5 -50mm vari-focal lens	2.7-13.5mm vari-focal lens	2.7-12mm vari-focal lens		2.7-13.5mm vari-focal lens	2.8mm fixed lens	6-50mm vari-focal lens	6-50mm vari-focal lens
IR/white light distance	90ft IR range	100ft IR range	120ft IR range	120ft IR range	90ft range white light		100ft IR range		130ft IR range	130ft IR range
Audio input/output	1 input/1 output	1 microphone built-in/1 line 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 microphone built-in/1 line output		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
Specialty AI plugin	---	---	---	---	---	Detects QR codes and registers the code's text.	---	---	Captures and reads vehicle license plates (ANPR).	ANPR + Make, Model and Color (MMCR).
Housing	Ultra low-profile vandal dome	Bullet	Bullet	Turret	Turret	Turret	Turret	Bullet	Bullet	

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