# BlackjackAi



Blackjack<sup>®</sup> Ai<sup>™</sup> servers and appliances powered by DW Spectrum<sup>®</sup> and AI.











## Add the Power of Advanced Neural-Network-Based Analytics to Your Video Streams with Blackjack® Ai™.

Blackjack® Ai<sup>™</sup> Artificial Intelligence Network Video Recorders (Ai NVR) and appliances are purpose-built solutions with built-in server-side analytics that unlocks advanced Ai capabilities on any connected video stream. This cost-effective, plug-and-play solutions, with servers powered by DW Spectrum® IPVMS, combine high-performance recording with video analytics in an easy-to-deploy, turnkey solution.

#### **Understanding DW's Blackjack Ai Solutions**



Powered by DW Ai Appliance

Deep learning analytics on an appliance, connected to any DW Spectrum IPVMS system for any connected stream.





Powered by DW Spectrum and DW Ai Server

Deep learning analytics at the server for any connected stream, integrated with DW Spectrum IPVMS.





Ai™ Server





DW Spectrum® IPVMS





Blackjack® Ai™

#### **All-in-One Device**

Achieve lower deployment costs with a single device that performs as an NVR and an Analytics server.

#### **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: bicycles, cars, counters, forklifts, motorcycles, persons, trucks, unclassified and vans.



Trucks



Cars



**Humans** 







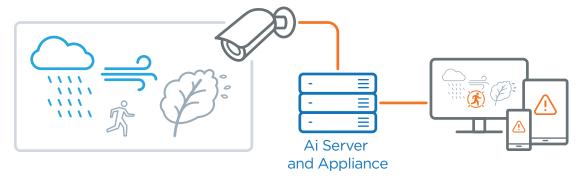


#### **Future-proof solution**

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.

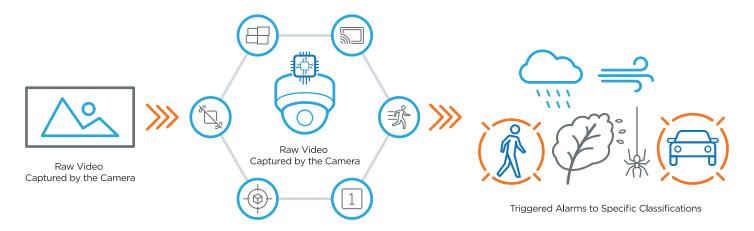
#### **Server-Side Analytics for Any Video Stream**

Bring server-side classified object detection to any video stream in your system.



#### **Logical Rules**

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







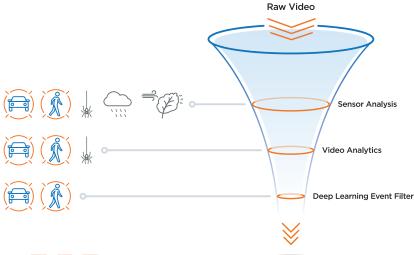
#### **Easy setup (no calibration)**

DW's Al 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.

#### Lower total cost of ownership

Combining Blackjack NVRs with an AI Appliance pre-installed, users can achieve a lower total cost of ownership with both flexibility and scalability with a video recording solution enhanced with deep-learning video analytics in a single appliance for any camera network.





#### **Deep Learning**

Blackjack Ai server-side intelligent algorithms offer deep learning with better object classification and identification of environmental elements. The result is substantially reduced false alarms, allowing only valid events to filter through Blackjack Ai servers to increase efficiency and productivity, and reduces unnecessary costs.







#### **Smart Storage Management**

Manage your recording storage smarter by fine-tuning events and alarms to be recorded. Combining Ai analytics, logic rules and non-detection zones, users can create conditions unique to their environment people and objects must trigger to activate an alarm.



### Seamless Integration with DW Spectrum IPVMS

The Blackjack AI NVRs combine Ai analytics and DW Spectrum IPVMS in a single platform, empowering users to mix and match DW analytics with any camera to optimize deployment and use the best camera to suit your site's requirements.



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



Deep Learning Object Detection



1 2 3













Logical Rules Counting Lines

Enter

Exit

Direction

Counting

**Detection Zones** 

Metadata







Appear









Intrusion

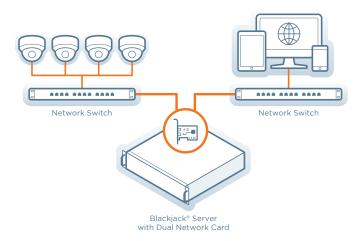
Tailgating

Disappear Stopped

Line Crossina

Tamper





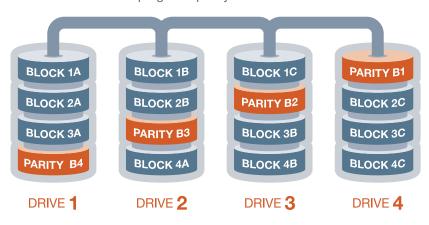
#### **Dual Network Ports**

Optimize network bandwidth by utilizing dual network ports to build a separate network for the surveillance system and keep that traffic off the main network, reserved for the NVR's communication.

#### **RAID Storage Mirroring\***

Add extra security to your video surveillance system by protecting recorded data and overcoming data loss in the case of a hard drive failure.

### RAID 5 Striping with parity across drives





### Onvif Conformant



#### Mouse & Keyboard Included

Blackjack® servers come with a USB mouse and keyboard included at no extra cost.

#### **ONVIF®** conformant\*

All Blackjack solutions are ONVIF conformant, creating a truly unique solution, to match your specific needs.

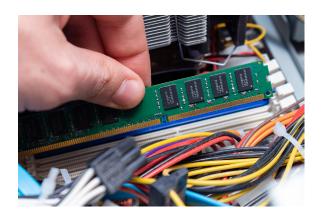
#### Rail Kit Included\*

All Blackjack® rackmount servers come with the rail kits included at no extra cost for easy out-of-the-box installation.









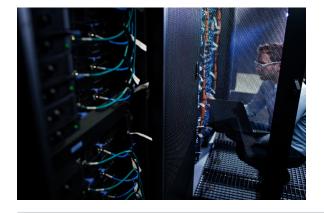
### Designed and Comissioned in the U.S.A

All DW recorders, workstations and NAS devices are designed, assembled and inspected in our California facility. Each product undergoes multiple levels of quality control to guarantee the highest quality and performance.

#### OS on dedicated SSD

DW's servers provide a dedicated SSD for the OS. This results in faster boot time, faster application loading times and improved system responsiveness.





### Next business day onsite hardware repair after remote diagnosis\*

If an issue occurs with your product that cannot be resolved by phone, DW will dispatch a certified technician to attempt repair of your machine at your place of business, usually the next business day.

#### **NDAA/TAA Compliant**

DW IP cameras, analog cameras, NVRs, DVRs, network devices and management software 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.









#### Al Servers:













|                                  | PART NUMBER                              | Blackjack Ai Rack™<br>2U w/RAID (DW-<br>BJAi2RxxTR)                                     | Blackjack Ai Rack™<br>2U w/RAID (DW-<br>BJAiRxxTR) | Blackjack Ai P-Rack™<br>2U w/RAID (DW-<br>BJAiPxxTR) | Blackjack Ai Tower™ full-size<br>(DW-BJAiTxxTR) | Blackjack Tower™ mid-size<br>(DW-BJAiMTxxT) |
|----------------------------------|--|---|--|--|---|---|
| Included DW Spectrum IP Licenses |  | 8 (2x DW-SPECTRUMLSC004)  |  | 4 (DW-SPECTRUMLSC004)                                | 4 (DW-SPECTRUMLSC004)                           |   |
| Included DW Ai Server Licenses   |  | 8 (2x DW-DWAiSLSC004)   |  | 4 (DW-DWAiSLSC004)                                   | 4 (DW-DWAiSLSC004)                              |   |
| Form Factor                      |  | 2U Rackmount  |  |  | Full-Size Tower                                 | Mid-Size Tower                              |
| Operating System                 |  | Windows 10 64 Bit on 2 x 240GB NVMe SSD (RAID1)   |  | Windows 10 64 Bit on 480GB SSD                       |   |   |
| CPU                              |  | Dual XEON Gold 6248R  | XEON Gold 6248R                                    | Intel® i7 processor                                  | Intel* i7 p                                     | processor                                   |
| Memory                           |  | 64GB  | 32GB   | 32GB   | 32  | GB  |
| Ethernet port                    |  | 2x 10Gb SFP+, 2x 1Gb base-T   |  | 2x 1G Ethernet ports                                 | 2x 1G Ethernet ports                            |   |
| System                           | Max Video Storage rate (Mbps)            | 600Mbps   | 600Mbps  | 320Mbps  | 320Mbps   | 320Mbps                                     |
| Storage                          | Max # of Analytic Streams<br>(Secondary) | Up to 128   | Up to 64   |  |   |   |
|                                  | Maximum Storage                          | 160TB, RAID5  |  | 120TB, RAID5   | 120TB, RAID5                                    | 48TB  |
| Video-Out                        | Outputs                                  | 1x Display Port, for system configuration   |  |  |   |   |
|                                  | Video Card                               | NVIDIA RTX A4000 16GB   |  | NVIDIA RTX A2000 12GB                                | NVIDIA RTX A2000 12GB                           | NVIDIA RTX A2000 12GB                       |
| Preloaded VMS Software           |  | DW Spectrum IPVMS   |  |  |   |   |
| Preloaded Analytic Software      |  | DW Ai Server  |  |  |   |   |
| Rail Kit                         |  | Included  | Included   | Included   |   |   |
| Warranty                         |  | 5 year HW warranty with next day on-site repair after remote diagnosis, keep your drive |  | 5 year limited                                       | 5 year limited                                  | 5 year limited                              |

Al Appliances:

PART NUMBER Included DW Spectrum IP Licenses Included DW Ai Server Licenses

Form Factor

Operating System

CPU

Memory

Ethernet Port

Preloaded Analytic Software Ai Configuration Tool Supported OS

Rail Kit

Warranty





Slim Desktop

separate SSD

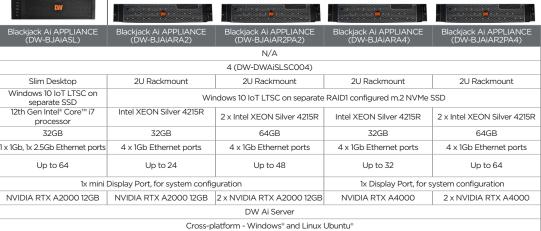
processor

32GB

Up to 64

N/A

5 years limited warranty



Included

5 year HW warranty with next day on-site repair after remote diagnosis

Max # of Analytic Streams (Secondary)

Outputs

Video Card

Designed and Commissioned in the U.S.A



#### Contact us:



System

Video-Out

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)1.514.360.13 |                                  |                             |  |  |
|                                       | Sales Email                      | sales@digital-watchdog.com  |  |  |
|                                       | Tech Support Fmail technicals    | upport@digital-watchdog.com |  |  |







www.digital-watchdog.com





<sup>\*\*\*</sup> An uninterrupted power supply (UPS) is recommended.