

No-Code Industrial Artificial Intelligence Solutions

QUALITY CONTROL SOLUTION FOR INDUSTRIAL APPLICATIONS

Inspector

Computer Vision Platform

NO-00

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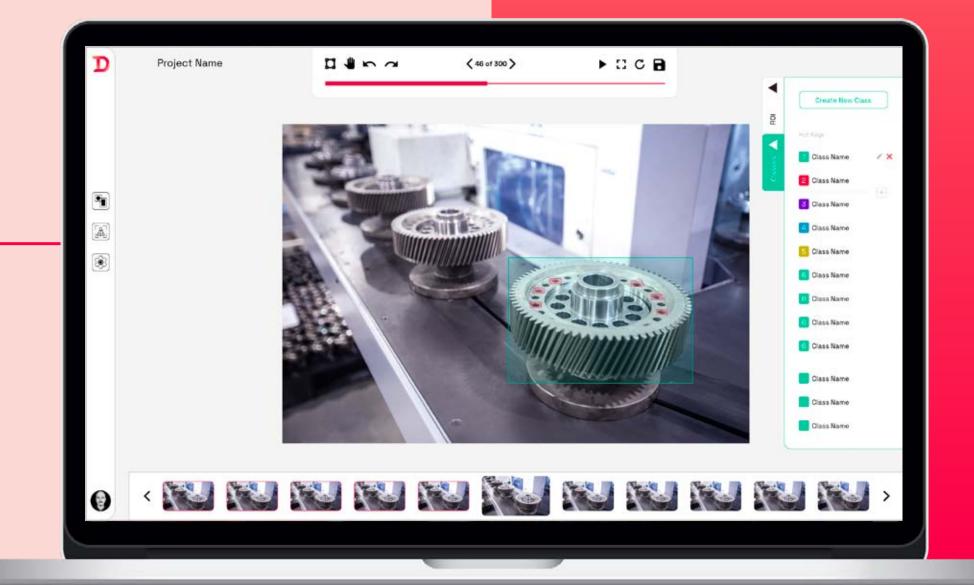




QUALITY CONTROL WITH COMPUTER VISION

Inspector is a computer vision solution for autonomizing your quality control processes in manufacturing. It easily performs operations such as defect detection, defect classification and absence detection.

Inspector is equipped with advanced deep learning algorithms and algorithms that automatically perform the data flow process.



FEATURES & DETAILS AN ARTIFICIAL INSPECTOR

Quickly and easily develop Computer Vision projects on this platform without writing code. Create as many datasets as you want and train and test dozens of different Al models.

Take images from cameras with a single click or upload existing images to the system to train Al models.

Quickly label the pictures with labeling tools and create a dataset. Deploy the trained models you have developed on any Edge device or in the cloud.

INSPECTOR'S CAPABILITIES

QUALITY CONTROL

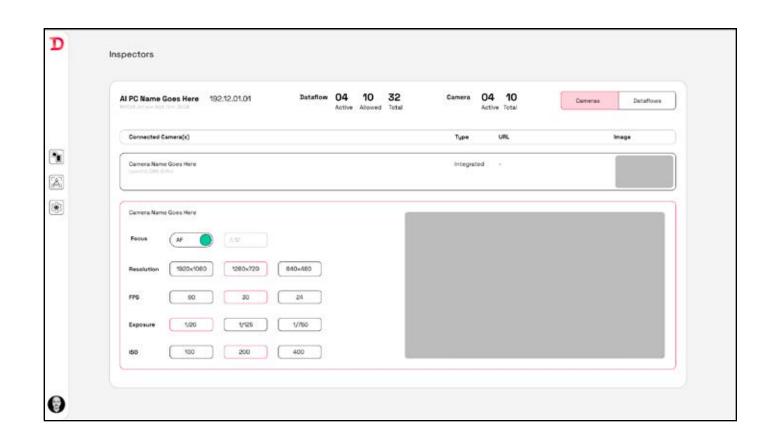
OBJECT DETECTION & CLASSIFICATION
DEFECT DETECTION & CLASSIFICATION
OBJECT TRACKING & COUNTING

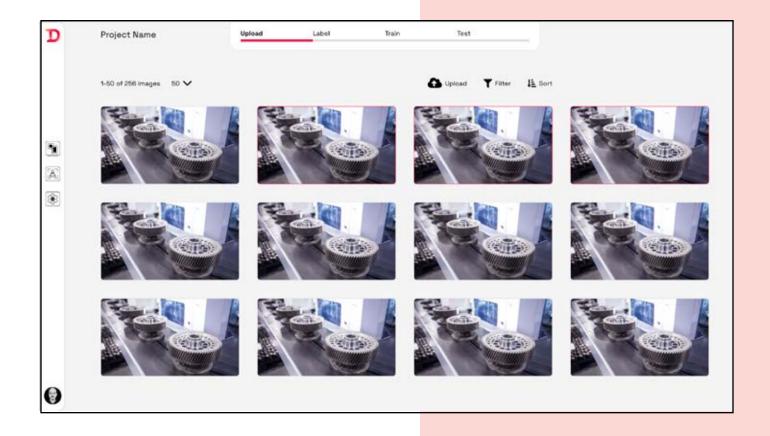
If the Human Eye Sees, it sees too. Even More and Faster.

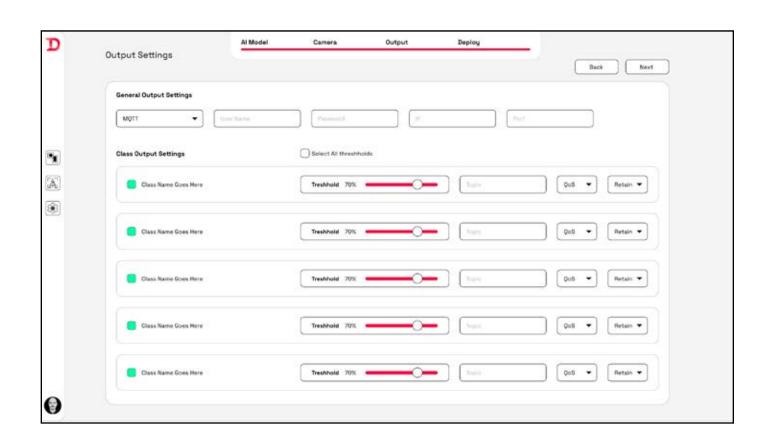
USER INTERFACE

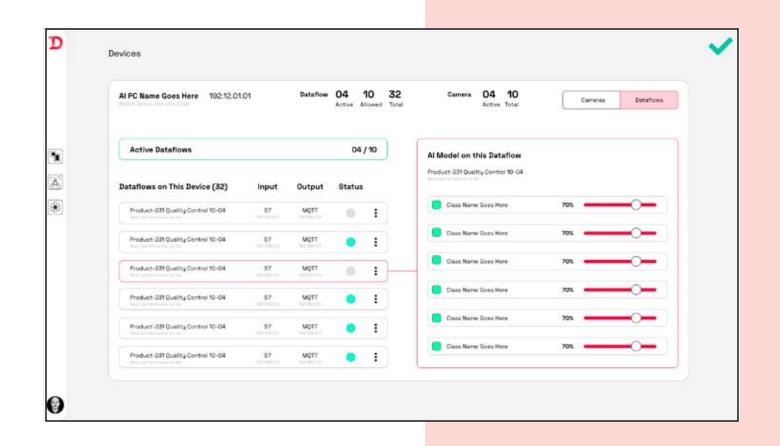
EVERYTHING YOU NEED

It Contains All the Tools You Need to Complete A Computer Vision Project.









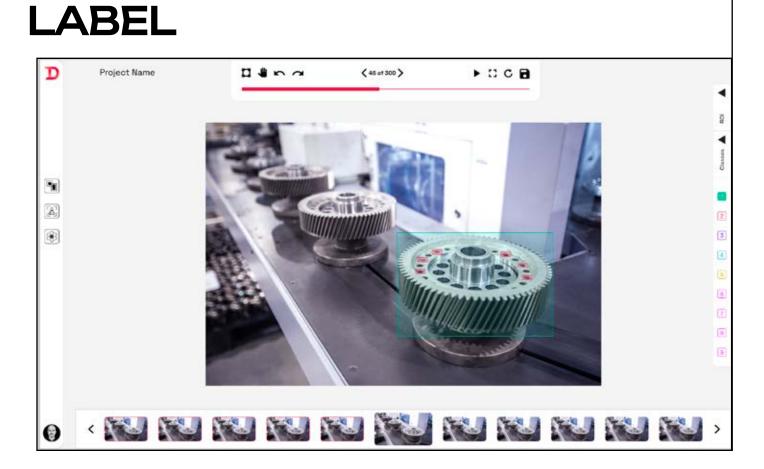
TOOLS

Dashboard
Device Management
Image & Video Retrival
Image Labeling
Al Model Training & Testing
Al Model Deployment
Input - Output Settings

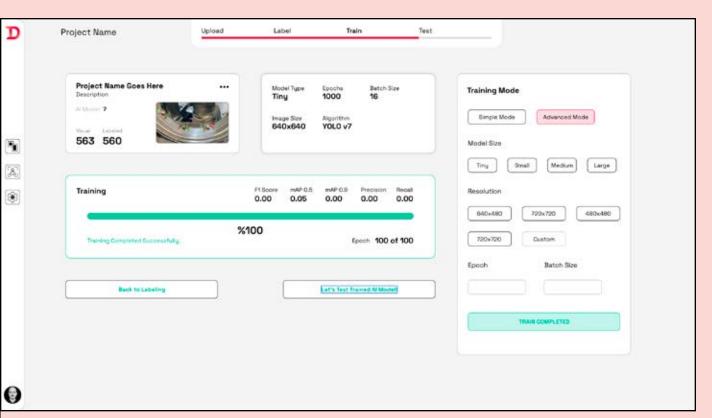
4 EASY STEPS TO COMPLETE YOUR AI PROJECTS

UPLOAD





TRAIN



DEPLOY

Select a Model	Al Model	Camera Output	Deploy		
Select a Model					Next
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ALL-IN-ONE SOLUTION PACKAGES

INSPECTOR STANDARD

Al Model

Up to 1 Model

INDUSTRIAL EDGE AI COMPUTER

NVIDIA JETSON ORIN NANO 8GB

Al Performance 40 TOPS

GPU 1024-core NVIDIA Ampere architecture GPU with 32 tensor cores

Max GPU Freq. 625Mhz

CPU 6-core Arm Cortex-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3

CPU Max Freq. 1.5 GHz

DL Accelerator 2x NVDLA v1

Vision Acc. 2x PVA v1

Memory 8GB 128-bit LPDDR5 68GB/s
Storage 2x M.2 Key-M 250GB SSD

Video Encode 1080p30 supported by 1-2 CPU cores

Video Decode 1 × 4K60 (H.265) | 2 × 4K30 (H.265) | 5 × 1080p60 (H.265) | 11 × 1080p30 (H.265)

PCIe $1 \times 4 + 3 \times 1$ (PCIe Gen3, Root Port, and Endpoint)

USB 3 × USB 3.2 Gen2(10Gbps) | 3 × USB 2.0

Networking 1 × GbE

Display 1 × 4K30 multi-mode DP 1.2 (+MST)/eDP 1.4/HDMI 1.4

Other I/O 3 × UART, 2 × SPI, 2 × I2S, 4 × I2C, 1 × CAN, DMIC & DSPK, PWM, GPIOs

Power 7W - 15W

Operating Temp. -100/600

Dimensions 110 x 130 x 60mm

Weight 760 gr



INDUSTRIAL AI CAMERA

4 TOPS of processing power (1.4 TOPS for AI - RVC2 NN Performance)

Run any Al model, even custom architectured/built ones (models need to be converted)

Active stereo IR dot projector improves depth perception, especially for low-visual-interest surfaces by projecting thousands of IR dots to the scene.

Night vision IR illumination LED enables running your AI and CV algorithms in low-light or no-light environments

Encoding H.264, H.265, MJPEG - 4K/30FPS, 1080P/60FPS

Computer vision warp (undistortion), resize, crop via ImageManip node, edge detection, feature tracking. You can also run custom CV functions

Stereo depth perception with filtering, post-processing, RGB-depth alignment, and high configurability

BNO086 IMU single chip 9 axis sensor with embedded sensor fusion

Object tracking 2D and 3D tracking with ObjectTracker node

Dimensions 111 x 40 x 31.3mm

Weight 184g

ALL-IN-ONE SOLUTION PACKAGES

INSPECTOR PRO

Al Model

Up to 4 Models

INDUSTRIAL EDGE AI COMPUTER

NVIDIA JETSON ORIN NX 16 GB

Al Performance 100 TOPS

GPU 1024-core NVIDIA Ampere architecture GPU with 32 tensor cores

Max GPU Freq. 918MHz

CPU 8-core Arm® Cortex®-A78AE v8.2 64-bit CPU2MB L2 + 4MB L3

CPU Max Freq 2 GHz

DL Accelerator 2x NVDLA v1

Vision Acc. 2x PVA v1

Memory 16GB 128-bit LPDDR5 102.4GB/

Storage 2x M.2 Key-M 250GB SSD

Video Encode 1x 4K60 | 3x 4K30 | 6x 1080p60 | 12x 1080p30 (H.265) H.264, AV1

Video Decode 1x 8K30 | 2x 4K60 | 4x 4K30 | 9x 1080p60 | 18x 1080p30 (H.265)

H.264, VP9, AV1

PCIe 3 x1 + 1 x4 PCIe Gen 4

USB 3x USB 3.2 Gen2

Networking 1 × GbE

Display 1x 8K30 multi-mode DP 1.4a (+MST)/eDP 1.4a/HDMI 2.1

Other I/O3 × UART, 2 × SPI, 2 × I2S, 4 × I2C, 1 × CAN, DMIC & DSPK, PWM, GPIOs

Power 10W - 25W Operating Temp. -10C / 60C

Dimensions 110 x 130 x 60mm

Weight 760 gr



INDUSTRIAL AI CAMERA

4 TOPS of processing power (1.4 TOPS for AI - RVC2 NN Performance)

Run any Al model, even custom architectured/built ones (models need to be converted)

Active stereo IR dot projector improves depth perception, especially for low-visual-interest surfaces by projecting thousands of IR dots to the scene.

Night vision IR illumination LED enables running your AI and CV algorithms in low-light or no-light environments

Encoding H.264, H.265, MJPEG - 4K/30FPS, 1080P/60FPS

Computer vision warp (undistortion), resize, crop via ImageManip node, edge detection, feature tracking. You can also run custom CV functions

Stereo depth perception with filtering, post-processing, RGB-depth alignment, and high configurability

BNO086 IMU single chip 9 axis sensor with embedded sensor fusion

Object tracking 2D and 3D tracking with ObjectTracker node

Dimensions 111 x 40 x 31.3mm

Weight 184g

ALL-IN-ONE SOLUTION PACKAGES

INSPECTOR ADVANCED

Al Model

Up to 10 Models

INDUSTRIAL EDGE AI COMPUTER

NVIDIA JETSON ORIN AGX 32GB

Al Performance 200 TOPS

GPU 512-core NVIDIA Volta™ GPU with 64 Tensor Cores

Max GPU Freq. 918MHz

CPU 8-core NVIDIA Carmel Arm®v8.2 64-bit CPU 8MB L2 + 4MB L3

CPU Max Freq 2 GHz

DL Accelerator 2x NVDLA v1 **Vision Acc.** 2x PVA v1

Memory 32 GB 256-bit LPDDR4x 136.5GB/s

Storage 2x M.2 Key-M 250GB SSD

Video Encode 4x 4k60 8x 4k30 16x 1080p60 32x 1080p30 (H.265) 4x 4k60 8x 4k30

14x 1080p60 30x 1080p30 (H.264)

Video Decode 2x 8K30 6x 4K60 12x 4K30 26x 1080p60 52x 1080p30 (H.265) 4x

4K60 8x 4K30 16x 1080p60 32x 1080p30 (H.264)

PCIe 1x8 + 1x4 + 1x2 + 2x1 (PCIe Gen4, Root Port & Endpoint)

USB 3x USB 3.1 + 4x USB 2.0

Networking 1 × GbE

Display 1x 8K30 multi-mode DP 1.4a (+MST)/eDP 1.4a/HDMI 2.1

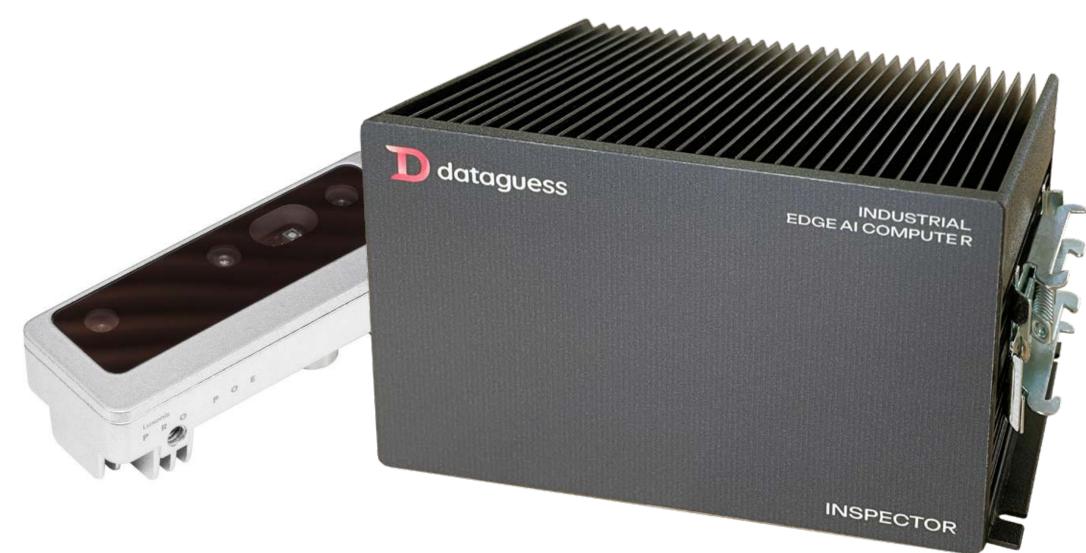
Other I/O 3 × UART, 2 × SPI, 2 × I2S, 4 × I2C, 1 × CAN, DMIC & DSPK, PWM, GPIOs

 Power
 15W - 30W

 Operating Temp.
 -10C / 60C

Dimensions 160 x 110 x 95mm

Weight 1340 gr



INDUSTRIAL AI CAMERA

4 TOPS of processing power (1.4 TOPS for AI - RVC2 NN Performance)

Run any Al model, even custom architectured/built ones (models need to be converted)

Active stereo IR dot projector improves depth perception, especially for low-visual-interest surfaces by projecting thousands of IR dots to the scene.

Night vision IR illumination LED enables running your AI and CV algorithms in low-light or no-light environments

Encoding H.264, H.265, MJPEG - 4K/30FPS, 1080P/60FPS

Computer vision warp (undistortion), resize, crop via ImageManip node, edge detection, feature tracking. You can also run custom CV functions

Stereo depth perception with filtering, post-processing, RGB-depth alignment, and high configurability

BNO086 IMU single chip 9 axis sensor with embedded sensor fusion

Object tracking 2D and 3D tracking with ObjectTracker node

Dimensions 111 x 40 x 31.3mm

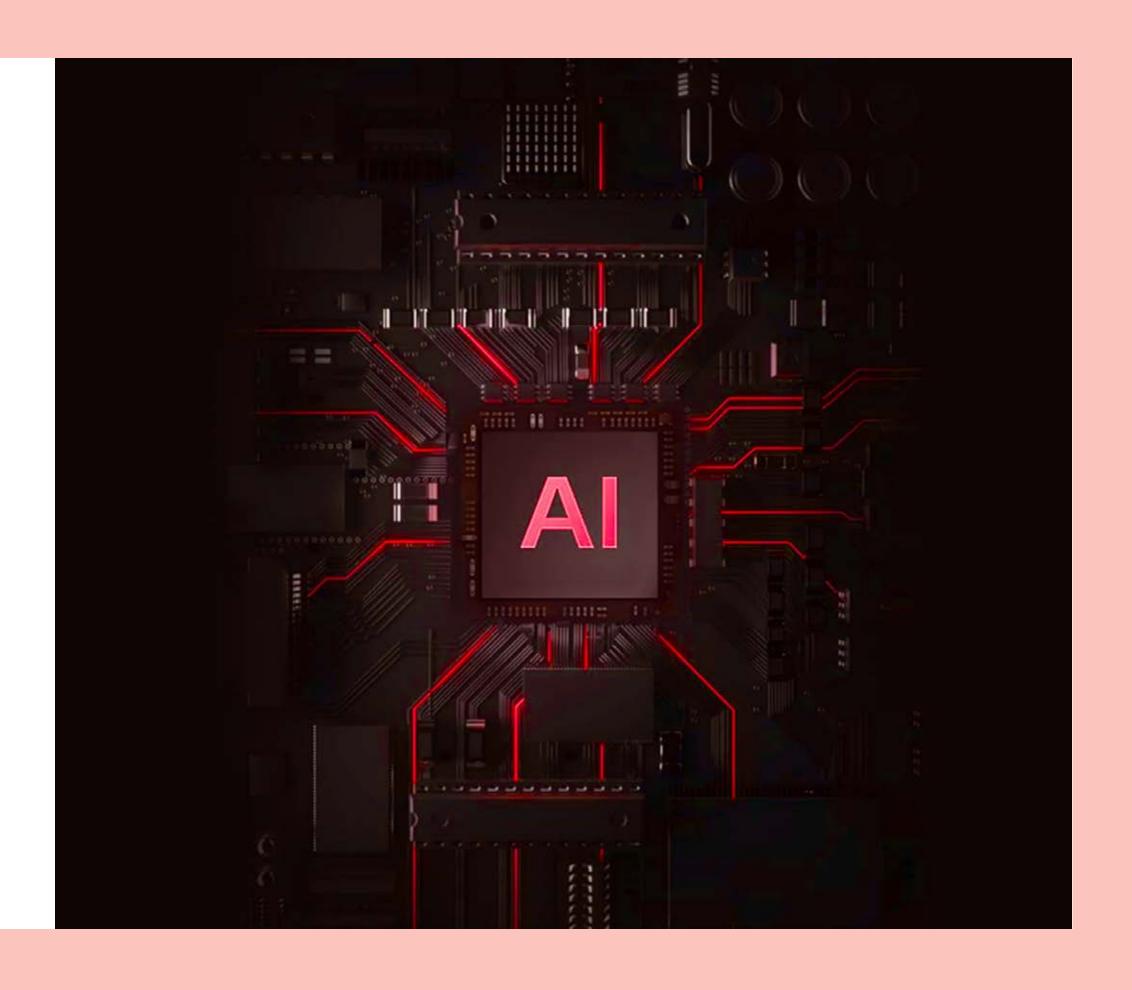
Weight 184g

	STANDARD	PRO	ADVANCED
Al Model	1 Model	Up to 4 Models	Up to 10 Models
Integrated Hardware Module Al Performance	NVIDIA JETSON ORIN NANO 8GB 40 TOPS	NVIDIA JETSON ORIN NX 16 GB 100 TOPS	NVIDIA JETSON ORIN AGX 32GB 200 TOPS
GPU	1024-core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	1024-core NVIDIA Ampere Architecture GPU with 32 Tensor Cores	512-core NVIDIA Volta™ GPU with 64 Tensor Cores
Max GPU Freq.	625 MHz	918 MHz	918 MHz
CPU	6-core Arm Cortex-A78AE v8.2 64-bit CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU	8-core NVIDIA Carmel Arm®v8.2 64-bit CPU
	1.5MB L2 + 4MB L3	2MB L2 + 4MB L3	8MB L2 + 4MB L3
CPU Max Freq	1.5 GHz	2 GHz	2 GHz
DL Accelerator	2x NVDLA v1	4x NVDLA v1	8x NVDLA v1
Vision Accelerator	2x PVA v1	4x PVA v1	8x PVA v1
Memory	8GB 128-bit LPDDR5 68GB/s	16GB 128-bit LPDDR5 102.4GB/	32 GB 256-bit LPDDR4x 136.5GB/s
Storage	M.2 Key-M 250GB SSD	2x M.2 Key-M 250GB SSD	2x M.2 Key-M 250GB SSD
Video Encode	1080p30 supported by 1-2 CPU cores	1x 4K60 3x 4K30 6x 1080p60	4x 4K60 8x 4K30 16x 1080p60
		12x 1080p30 (H.265) H.264, AV1	32x 1080p30 (H.265) 4x 4K60 8x 4K30
			14x 1080p60 30x 1080p30 (H.264)
Video Decode	1 × 4K60 (H.265) 2 × 4K30 (H.265)	1x 8K30 2x 4K60 4x 4K30	2x 8K30 6x 4K60 12x 4K30 26x 1080p60
	5 × 1080p60 (H.265) 11 × 1080p30 (H.265)	9x 1080p60 18x 1080p30 (H.265)	52x 1080p30 (H.265) 4x 4K60 8x 4K30
		H.264, VP9, AV1	16x 1080p60 32x 1080p30 (H.264)
PCle	1 × 4 + 3×1 (PCIe Gen3, Root Port, and Endpoint)	3 x1 + 1 x4 PCle Gen 4	1x8 + 1 x4 + 1 x2 + 2 x1 (PCIe Gen4, Root Port & Endpoint)

INSPECTOR ENTERPRISE

Our Dataguess Inspector Enterprise solution runs multiple projects on a central server. Server requirements and license models are determined according to project needs. Don't hesitate to contact our sales department for more detailed information about the Dataguess Inspector Enterprise solution.

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Less Effort, More Benefit.

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