

Vadzo Imaging Expands Innova High-Resolution GigE Camera Series for Vision Deployments in Surveillance & Smart Cities

*2MP-8.46MP GigE Camera Portfolio
Featuring Sony Starvis 2, Pregius S, ONVIF
& NDAA Compliant Cameras for Smart
Vision Applications*

SEOUL, SOUTH KOREA, June 11, 2026
/EINPresswire.com/ -- Vadzo Imaging, a
provider of embedded vision cameras,
today announces the availability of the
[NDAA Compliant complete Innova
Series GigE camera portfolio](#), spanning

2MP to 8.46MP, built on imaging
sensors from Sony Starvis and onsemi,

and unified by a common GigE network architecture with full ONVIF compliance and Power over Ethernet support. The Innova-662CRS HDR GigE camera, Innova-234CGS Global Shutter GigE camera, Innova-521CRS Low Light GigE camera, Innova-900MGS Monochrome Global Shutter GigE camera, Innova-678CRS High Resolution GigE camera, and Innova-715CRS 4K GigE camera are available now for OEM evaluation and production deployment across industrial monitoring, smart city infrastructure, and large-scale surveillance systems.

The Innova Series is designed for system integrators who need to deploy cameras at scale across standard IP network infrastructure, without proprietary cabling, dedicated frame grabbers, or custom VMS middleware. Every camera in the portfolio runs on Gigabit Ethernet, streams over ONVIF, and powers via PoE, which means the integration architecture is defined once and the sensor configuration is a specification decision, not an engineering change.

Why GigE Camera Solutions Are Winning Enterprise Vision Deployments

As vision deployments scale from single-room installations to multi-floor facilities, distribution centers, and city-wide infrastructure, the limitations of direct-connect camera interfaces become a significant engineering constraint. GigE cameras eliminate those constraints by running over standard Ethernet; the same network infrastructure already present in virtually every commercial and industrial facility making large-scale camera deployments a network planning



One Network. Six Sensors. Unlimited Scale.
Innova GigE Cameras with Sony & onsemi Sensors for Distributed IP Vision

- ✓ Ultra Low-Light & NIR Sensitivity
- ✓ GigE + ONVIF + PoE Architecture
- ✓ H.264 / H.265 / MJPEG Streaming
- ✓ NTP / PTP Time Synchronization
- ✓ Long-Distance IP Deployment (100m+)
- ✓ Scalable Multi-Camera Networks

NDAA COMPLIANT REACH COMPLIANT ONVIF COMPLIANT onsemi SONY

Vadzo Innova High Resolution GigE Camera

exercise rather than a cabling project.

What has historically separated a good GigE camera from a compliant one is image quality consistency across real-world lighting. Most network environments are not studio-controlled; they include overhead flicker, high-contrast zones, near-dark corners, and outdoor lighting that shifts by the hour. The Innova Series addresses this not at the software level, but at the sensor level, with tuned HDR, ultra-low-light capability, and global shutter options built into the hardware; so OEM integrators are not left compensating for sensor limitations in their application stack.

Vadzo Innova High Resolution GigE Camera Portfolio

The Innova Series gives OEM integrators and system designers access to six distinct sensor configurations, each optimized for a specific imaging requirement within a single unified network architecture. Every Innova camera runs on Gigabit Ethernet, streams over ONVIF, and powers via PoE, which means the integration work is done once, and the sensor choice is a specification decision, not an architecture change.

Innova-662CRS: Sony Starvis 2 IMX662 Ultra Low-Light HDR GigE camera

Built on the Sony IMX662 STARVIS 2 sensor, the Innova-662CRS Ultra Low Light HDR GigE camera is the configuration for low-ambient-light environments where standard cameras produce noise. Clear HDR, Fusion HDR and NIR sensitivity at 940 nm extract usable detail from near-dark scenes, while onboard dewarping processes wide-angle lens output, up to 200° DFOV, without burdening the host system. The right choice for indoor monitoring zones where lighting control is limited and wide field of view is a requirement.

Key specs: 2MP (1920×1080) | Sony IMX662 1/2.8" 2.9 μm STARVIS 2 | GigE Camera | ONVIF Profile S/T/G/M | PoE 802.3af | Clear HDR and Fusion HDR | Onboard dewarping | -40°C to 85°C

[Innova-234CGS: onsemi AR0234 Global Shutter GigE Camera](#)

The Innova-234CGS Color Global Shutter ONVIF GigE camera is the correct configuration wherever motion distortion is a system risk. Rolling shutter cameras introduce image skew when subjects move fast. The AR0234 global shutter eliminates that entirely by capturing all pixels simultaneously. H.264, H.265, and MJPEG encoding gives network administrators bandwidth flexibility across high-camera-count deployments. The preferred choice for conveyor systems, robotic arms, and vibration-prone industrial environments.

Key specs: 2MP (1920×1200) | onsemi AR0234 1/2.6" 3.0 μm BSI Pixel | Global Shutter GigE Camera | ONVIF Profile S/T/G/M | PoE 802.3af | H.264/H.265/MJPEG | -40°C to 85°C

[Innova-521CRS: onsemi AR0521 5MP Low-Light GigE Camera](#)

The Innova-521CRS 5MP HDR GigE Camera steps up to 5MP on the onsemi AR0521 sensor for deployments where 1080P lacks the spatial detail needed for subject identification at distance, wide-area facility floors, parking structures, and retail environments where camera count needs to be minimized. Superior low-light sensitivity means resolution is not traded for sensitivity: the AR0521 delivers both. The configuration of choice where coverage area per camera and identification range are the primary design constraints.

Key specs: 5MP (2592×1944) | onsemi AR0521 1/2.5" 2.2 µm BSI Pixel | GigE Camera | ONVIF Profile S/T/G/M | PoE 802.3af | Low-light HDR | -30°C to 70°C

Innova-900MGS: Sony Pregius S IMX900 3.2MP Monochrome Global Shutter GigE Camera

The Innova-900MGS brings Sony Pregius S global shutter performance to GigE-networked machine vision. Monochrome output with Quad HDR up to 120 dB, fast auto-exposure, and high NIR sensitivity at 850 nm and 940 nm makes it the right configuration for controlled-illumination inspection environments. The only GigE-connected IMX900 global shutter camera in the Innova portfolio, delivering machine vision imaging performance over standard network infrastructure without dedicated frame grabbers.

Key specs: 3.2MP (2064×1552) | Sony Pregius S IMX900 1/3.1" 2.25 µm | Global Shutter | Quad HDR (120 dB) | GigE Camera | ONVIF Profile S/T/G/M | PoE 802.3af | -30°C to 85°C

Innova-678CRS: Sony STARVIS 2 IMX678 High Resolution HDR ONVIF GigE Camera

The Innova-678CRS 4K HDR GigE camera, built on the Sony IMX678 STARVIS 2 sensor with up to 110 dB dynamic range. At 8.4MP (3856×2180), it captures sufficient spatial detail for wide-area deployments where digital zoom, forensic review, or license plate recognition at distance are part of the use case. H.264 and H.265 encoding keeps 4K bandwidth manageable on existing network infrastructure. The configuration for smart city traffic nodes, large commercial properties, and campus-wide deployments where resolution and HDR performance must coexist.

Key specs: 8.4MP (3856×2180) | Sony STARVIS 2 IMX678 1/1.8" 2.0 µm Pixel | HDR (110 dB) | GigE Camera | ONVIF Profile S/T/G/M | PoE 802.3af | H.264 and H.265 | -30°C to 70°C

Innova-715CRS: Sony IMX715 STARVIS | Ultra Low-Light 4K

The Innova-715CRS combines 4K resolution with the ultra-low-light sensitivity of the Sony IMX715 STARVIS sensor and an auto IR-cut filter for hands-free day/night transition. At 8.46MP (3864×2192), it maintains 4K output from full daylight through near-total darkness without manual intervention, the right configuration for outdoor perimeter security, highway monitoring, and tunnel or underpass surveillance where lighting conditions are entirely outside operator control and resolution cannot be sacrificed for sensitivity.

Key specs: 8.46MP (3864×2192) | Sony STARVIS IMX715 1/1.8" 2.0 μm | Ultra Low-Light | Auto IR-Cut | GigE Camera | ONVIF | PoE 802.3af | H.264/H.265/MJPEG | -30°C to 70°C

What Every Innova Camera Delivers

Beyond individual sensor performance, the shared architecture of the Innova Series is what makes it a genuine platform for scalable OEM deployment rather than a collection of standalone products:

Gigabit Ethernet: Stable, high-bandwidth video transmission over standard IP infrastructure, cable runs up to 100 meters per segment

ONVIF compliance (Profile S/T/G/M): Interoperable out of the box with any ONVIF-compatible VMS, NVR, or monitoring platform; no proprietary software required

Power over Ethernet (PoE): Single-cable power and data, eliminating dedicated power runs at each camera location

Multi-resolution support: All cameras support VGA through their native maximum resolution, giving integrators frame rate and bandwidth flexibility within the same hardware

Sensor-level image tuning: HDR, auto-exposure, and low-light calibration performed at the sensor, not compensated in post-processing

Long-distance networking: Standard Ethernet switching infrastructure extends Innova deployments to facility-wide or campus-wide scale

VISPA NXT SDK: Developer Integration Layer

Innova cameras are supported by the VISPA NXT SDK, providing programmatic access to all camera functions over the network. Developers can perform network discovery and camera configuration, control streaming parameters and codec selection, manage exposure, gain, ROI, and white balance, configure Smart GPIO and trigger synchronization, apply user access and security controls, and execute secure OTA firmware updates, all through a unified API layer. The VISPA NXT SDK is available in C, C++, and Python across Windows, Linux, and Android platforms, enabling production-grade integration and full lifecycle management for OEM deployments at scale.

"GigE cameras have become the default choice for scalable vision deployments, but what we hear consistently from OEM teams is that ONVIF compliance on paper and ONVIF compatibility in practice are two different things and that sensor performance in real facility lighting rarely matches datasheet conditions. The Innova GigE Camera Series is our answer to both of those

gaps. Every camera in the portfolio has been validated against real VMS platforms and tuned for the lighting conditions our customers actually deploy into, not controlled lab environments." - Alwin Vincent, Product Manager, Vadzo Imaging

Where the Innova Series Is Being Deployed

Security system integrators building IP surveillance infrastructure choose the Innova Series because ONVIF compliance removes the VMS compatibility question entirely. Integrators working with Milestone, Genetec, Hikvision platforms, or any ONVIF-compliant recording system can connect Innova cameras directly; no driver development, no custom middleware. The sensor range across the portfolio means perimeter, indoor, and high-contrast zones can all be addressed with Innova hardware within a single-vendor network.

Smart city and traffic management programs benefit from the Innova-678CRS High Resolution GigE camera and Innova-715CRS GigE camera at intersections and highway monitoring points, where 4K resolution supports both live monitoring and forensic review from a single camera installation. PoE infrastructure at roadside cabinets eliminates separate power supply procurement, and ONVIF compatibility integrates directly with municipal traffic platforms already in operation.

Logistics operators managing large distribution centers and warehouse facilities use the Innova-521CRS Low Light GigE Camera for wide-area floor coverage where 5MP resolution at height captures enough detail for goods tracking and exception detection across wide fields of view, and where the GigE network infrastructure already in place for inventory systems extends naturally to camera connectivity.

Industrial facility operators requiring machine-vision-grade imaging on standard network infrastructure use the Innova-900MGS Mono GigE Camera for production-line and inspection applications, where global shutter performance, NIR sensitivity, and Quad HDR deliver the image consistency that automated inspection algorithms require without the dedicated frame grabbers and proprietary cabling that machine vision cameras traditionally demand.

Frequently Asked Questions

What makes the Innova GigE camera Series suitable for large-scale multi-camera deployments?

The Innova Series runs entirely on standard Gigabit Ethernet with PoE; the same infrastructure present in most commercial and industrial facilities. ONVIF compliance means all cameras connect directly to existing VMS and NVR platforms without custom integration work. The result is that scaling from 10 cameras to 100 is a network capacity decision, not an engineering project.

Which Innova ONVIF GigE camera is best for environments with challenging or variable lighting?

For low-light environments, the Innova-662CRS (Sony IMX662) and Innova-715CRS (Sony IMX715) provide the strongest low-light sensitivity. For high-contrast scenes with both bright and dark regions simultaneously, the Innova-678CRS (Sony IMX678, up to 110dB HDR) is the recommended configuration. For machine vision in controlled-illumination setups, the Innova-900MGS monochrome global shutter sensor handles NIR-illuminated inspection environments most effectively.

Are Innova GigE camera products compatible with third-party VMS platforms?

Yes. All Innova Series cameras are ONVIF-compliant and compatible with any VMS or NVR platform that supports the ONVIF standard including Milestone XProtect, Genetec Security Center, and other major platforms used in commercial and industrial deployments. No proprietary drivers or software development is required on the VMS side.

Can Innova ONVIF GigE camera portfolio be customized for OEM product integration?

Yes. Vadzo supports full OEM customization across the Innova Series including board redesigns, firmware modifications for custom feature sets, integration of NIR and color LED array boards, lens holder and filter modifications, and IP-rated enclosure design and manufacturing. Evaluation kits ship within 48 hours, and volume pricing is available on request through the Vadzo sales team.

Is there a global shutter option available in the Innova GigE camera lineup?

Yes. The Innova-234CGS is built on the onsemi AR0234 global shutter sensor at 1080P, and the Innova-900MGS is built on the Sony IMX900 Pregius S global shutter sensor at 3.2MP monochrome. Both eliminate rolling shutter distortion; the Innova-234CGS for color network surveillance applications, and the Innova-900MGS for machine vision and NIR imaging applications.

Availability

The Innova-662CRS, Innova-234CGS, Innova-521CRS, Innova-900MGS, Innova-678CRS, and Innova-715CRS are available now for OEM evaluation and production deployment. Technical documentation, datasheet downloads, and evaluation kit requests are available at vadzoimaging.com/gige-cameras. For volume pricing and OEM customization inquiries, contact support@vadzoimaging.com or call +1 817-678-2139.

About Vadzo Imaging

Vadzo Imaging develops high-performance embedded and machine vision cameras for OEMs and system integrators building next-generation intelligent systems. The company delivers

imaging platforms across USB, MIPI, GigE, Wi-Fi, and SerDes interfaces, supporting applications in industrial automation, robotics, smart surveillance, smart city infrastructure, and edge AI. Beyond hardware, Vadzo provides end-to-end imaging expertise including sensor integration, ISP tuning, firmware development, and OEM customization services that accelerate development and deployment at scale.

Alwin Vincent

Vadzo Imaging

+1 817-678-2139

alwin@vadzoimaging.com

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