# **NEXT**

# MODULAR SENSOR SYSTEM

From install and setup, to Al-enhanced imaging, to advanced onboard technologies, NEXT will change your entire camera experience. The powerful Al-based analytics and color forensic evidence—along with the modular design with mix-and-match components—support endless customer applications.



# Five-Minute, Three-Step Installation

Our patented snap-and-twist design, combined with the sensor's Al-powered auto-tuning, reduce installation and setup time to under 5 minutes.

# Practical Analytics for Real-World Problems

Get real-time intel so you can actively detect incidents before they become critical situations, e.g., a loitering analytic could trigger the camera's lightbars and warning messages.

# Most Powerful Al Imaging on the Market

The sensor's AI Vision adds a layer of intelligence to traditional video for sharper, clearer, less pixelated images with better color integrity, 24/7.

# Unlimited Mix-and-Match Applications

Just a handful of unique components can be mixed and matched as your needs evolve; all components are completely modular, hot-swappable, and universally interchangeable.

#### A Complete Communication System Onboard

The camera is packed with intelligence, including customizable LED signal lightbars, as well as 2-way audio, so you can listen in and broadcast instructions.

# The Easiest Camera You'll Ever Install

#### Screw. Snap. Twist. Done.

Install each camera in five minutes or less! Here's how...



#### Four-Screw Install

Affix the base to its surface with just four screws, then simply snap and twist the remaining components together—no additional tools or hardware required.



#### **Direction Indicators**

Physical indicators on the various components allow you to intuitively orient them for fast installation, and make it impossible to install the camera incorrectly.



#### **Remote Positioning**

Set up the perfect field-of-view from anywhere within seconds. This is a one-person job, with no ladders or cell phones required!



#### **PoE Status Indicator**

In addition to providing power/data status, an LED on the network hub indicates the power level status, so you can self-diagnose a potential power issue.



#### **Automated Image Tuning**

The camera's AI Vision does all the fine tuning automatically, optimizing the camera for its environment without manual intervention.



#### **Single-Step Corridor Mode**

The imager automatically orients itself to corridor/hallway mode.



#### The Fixture



The Camera Sensor



#### IP Address on the Hub

The camera's IP address resides on the network hub (which manages up to 4 sensors); there's no need to allocate a new address if you add or replace a camera sensor.



#### **Factory-Sealed Camera**

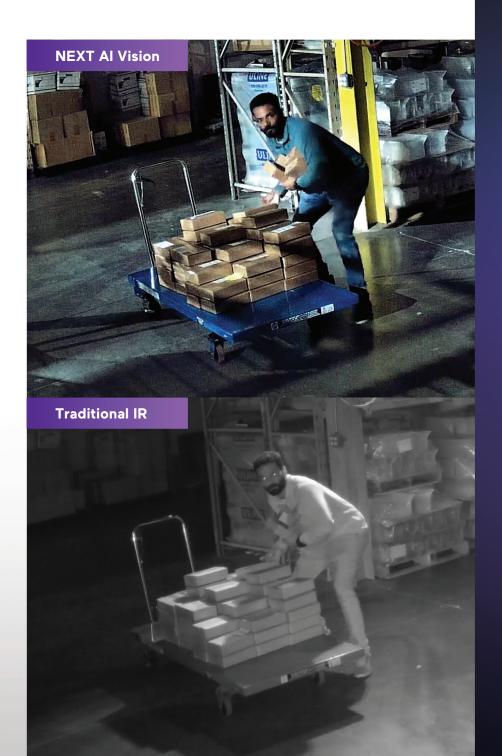
This eliminates risk of improper installation, water and dust intrusion, and even fingerprints on the lens.



# Unparalleled Video Clarity in Any Environment

#### No Light? No Problem!

Any camera can deliver a great picture in ideal conditions. But how a camera responds when lighting conditions are compromised makes all the difference. NEXT incorporates Al Vision for sharper, clearer images—always in color—in even the most demanding circumstances.





#### **Real-Time Auto-Tuning**

NEXT's Al Vision does all the fine tuning automatically, constantly optimizing the camera for its environment and lighting, in real-time, without manual intervention.



#### See Colors in the Dark

The camera's Artificial Intelligent Retina (AI-R) lets you see colors in as low as 0.02 lux, so you can quickly detect incidents and identify suspects, even in near-dark conditions.



#### Leverage Color-Based Analytics

Perform searches based on things like the color of a person's shirt and/or pants, or the color of a vehicle, even in the dark (when traditional cameras switch to black & white).



#### Say Goodbye to IR

Eliminate the inconveniences that come with IR—like lens spotting, IR flare and unusable video in the rain.

# **The Smartest Camera** in the Room

#### **An Entire Communication System** Packaged into a Single Device

With one of the smallest footprints in the industry, this camera is bundled with intelligent features that render it more than just a camera—it's a self-contained solution with an advanced onboard communication system.



#### **Al Analytics**

Real-time intel lets you proactively detect and prevent incidents before they become critical situations.



#### **Programmable LED Signal Lightbars**

Four programmable lightbars can communicate situational awareness status, e.g., flashing red for warning, solid green for all-clear, blue for shift change, amber for person in lobby, etc.

When used with Vicon's Anavio platform, each NEXT sensor comes with a free Anavio license.



#### **Powerful Microphones**

Two powerful microphones let you hear what's going on within 50 feet (15 m) in any direction of the sensor.



#### 360° Speakers

Two commercial-grade speakers emit customized messages up to 50 feet (15 m) in all directions, so you can communicate pre-recorded instructions and warnings PLUS direct talk-down in real-time.

#### Will These Features Work With My VMS?

Yes! NEXT is certified for compatibility with the industry's leading VMS platforms, allowing you to leverage all of these innovative features without having to rip and replace your existing systems and infrastructure.



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# Your Modular NEXT Ecosystem

#### Here's How It Comes Together

The system's modular design allows it to adapt to your unique needs, supporting a myriad of applications with interchangeable, hot-swappable, mix-and-match components.

#### The Mounts\*



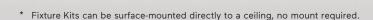
#### The Fixtures



#### The Camera Sensors



- A single network hub (and IP drop) powers from 1-4 sensors and accommodates any fixture.
- All mounts and fixtures are universally compatible with the network hub and camera sensors.
- Each mount and fixture can be mixed and matched—hot swappable—as your requirements change.
- The installation process is identical for every configuration, significantly reducing the learning curve.
   Once you learn how to install one, you can install any!













## **Camera Sensor**

# System on Chip (SoC) SoC Al Vision Processor Neural Net Processing 20 TOPS Memory 2GB DDR + 4GB eMMC

| lmaging                       |  |
|-------------------------------|--|
| Image Sensor                  | 1/1.8"   |
| Resolution                    | Ultra HD 4K (3840 x 2160)  |
| Image Signal Processing (ISP) | Al De-noise, Neural Net HDR  |
| Image Settings                | Automatic; self-tuning with<br>Al signal processing  |
| Minimum Illumination          | Low-light color 0.02 lux   |
| IR                            | Artificial Intelligent Retina (Al-R)   |
| Day/Night                     | Al ISP in full color   |
| WDR                           | 120 dB True WDR  |
| Shutter Speed                 | Auto (full frame rate)   |
| On-Screen Display             | Date and time Camera name/text string (up to 85 characters, customizable) OSD position setting Configurable font color, background color, and character size |

| Positioning      |  |
|------------------|--|
| Lens Positioning | Remotely adjustable pan, tilt, roll, zoom (PTRZ) |
| Pan (Yaw)        | +/- 175°, > 10°/s                                |
| Tilt (Pitch)     | 15° ~ 95°, > 10°/s                               |
| Roll             | -5° ~ 95°, > 10°/s                               |
| Presets          | 2  |
| Orientation      | Landscape and portrait<br>(corridor) modes       |
| Privacy Zones    | 8 zones  |

| Video  |  |
|--|--|
| Image Compression  | H.265, H.264, MJPEG  |
| Maximum Frame Rate   | 30 fps   |
| Resolution & Streams<br>4 streams @ 30fps<br>3840 x 2160<br>1280 x 720<br>720 x 408<br>384 x 216 | 4 streams @ 25fps<br>3840 x 2160<br>1920 x 1080<br>1280 x 720<br>720 x 408 |
| Maximum Streams  | 10 at 8 Mbps per stream<br>(80 Mbps total)                                 |
| Customized Video Profile   | CBR/CVBR   |
| Data Rate  | 500~12000 bps  |

| Lens          |  |
|---------------|--|
| Field-of-View | Wide: 109.8° (H) x 61.8° (V)<br>Tele: 57.2° (H) x 32.2° (V)  |
| Focal Range   | 4.42 mm - 9.51 mm<br>(motorized varifocal<br>with autofocus) |
| Focus Control | Auto   |
| Aperture      | f1.35  |
| Iris          | P-Iris (Auto)  |

| Communications           |                                      |
|--------------------------|--------------------------------------|
| Audio Compression Format | A-Law/µ-Law, Opus                    |
| Microphones              | 2 microphones; up to 50 ft (15 m)    |
| Speakers                 | 2 speakers; up to 50 ft (15 m)       |
| Pre-Recorded Messages    | 10 customizable audio files          |
| Direct Talk-Down         | Yes                                  |
| LED Signal               | 4 RGBW Lightbars; up to 50 ft (15 m) |

### Camera Sensor cont'd

| System Integration  |  |
|---------------------|--|
| Real-Time Analytics | Motion detection, tamper/blur detection, tripwire/line detection cross detection, intrusion detection, crowding detection, loitering detection, tailgating detection |
| Forensic Analytics  | Museum search, classification (people, vehicle, animal), vehicle color, people attributes (lower and upper body clothing color)                                      |
| Onboard Storage     | microSDXC (sold separately)<br>Up to 1TB per Sensor  |

### **Network Hub**



| System on Chip (SoC)               |  |
|------------------------------------|--|
| SoC                                | Dedicated Network Processor  |
| Memory                             | 1GB DDR + 4GB eMMC   |
| Sensor Management<br>(1-4 Sensors) | Management of network settings,<br>sensor configuration, backup<br>and restoration of settings,<br>firmware upgrades |

| Network   |                      |
|-----------|----------------------|
| Ethernet  | 10/100/1000 Mbps     |
| Connector | RJ45 (IP67 coupler)  |
| Control   | Reset/Default button |

| Electrical           |  |
|----------------------|--|
| PoE                  | Solo/Duo Sensor: 802.3at<br>Trio/Quad Sensor: 802.3bt      |
| LED Status Indicator | Power/Data<br>Power level detection status<br>(af, at, bt) |

| Alarms       |   |
|--------------|---|
| Input/Output | 1 dry contact/1 dry relay output<br>(terminal block at pigtail) |

# System Camera Sensor + Network Hub



#### General

**Power Consumption** 

Solo: 18.4 W (802.3at) Duo: 27.7 W (802.3at) Trio: 37.7 W (802.3bt) Quad: 47 W (802.3bt)

Protocols

IPv4, IPv6, HTTP, HTTPS, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, ICMP, IGMP, DHCP, ARP, IEEE 802.1X, FTP, RTCP, SMTP, SNMP v1/2c/3, QoS, TLS, LDAP, ONVIF Profile G/T/S/M

Utilities

PRONTO network configuration and firmware management (for VMS use)

Web Browser

Safari, Mozilla Firefox, Chrome, Microsoft Edge

Security

Password protection, IP address filtering, HTTPS, IEEE 802.1X network access control, Digest authentication, Secure boot, SB-327 support

| Account Management     | Multiple user groups<br>(10 admin/operator/user)     |
|------------------------|--|
| Profile Management     | User configurations import/export                    |
| Firmware Update        | Web update, PRONTO,<br>Over-the-Air (OTA) for Anavio |
| Language               | English  |
| Environmental          |  |
| Operating Temperature  | -40°F to 131°F (-40°C to +55°C)                      |
| Cold Start Temperature | -40°F (-40°C)  |
| Storage Temperature    | -40°F to +140°C (-40°C to +60°C)                     |
| Operating Humidity     | 90%, non-condensing                                  |
| Weather Resistance     | IP67   |
| Vandal Resistance      | IK10   |

#### Regulatory

CE

EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, UKCA

| FCC               | FCC, Part 15, Subpart B, Class A                                       |
|-------------------|--|
| RoHS              | Directive 2011/65/EU<br>and EN 63000-2018;<br>EU Directive 2015/863/EU |
| UL                | UL 62368-1 and CSA C22.2<br>No. 62368-1:19                             |
| Country of Origin | Taiwan   |
| Warranty          | 5 years  |

#### **Dimensions + Construction**

#### Solo Fixture Kit + Camera Sensor

Camera Sensor Material: Aluminum Magnesium

Alloy and Polycarbonate (factory sealed)

Solo Fixture Material:

Engineered Polymer

Combined Weight: 1.63 lbs (0.74 kg)

Color: Black

Compatible With: Conduit Mount, Wall Mount, Pendant Mount, Electrical Box Adaptor, Pole Mount,

Corner Mount, In-Ceiling Mount



#### Trio Fixture Kit + Camera Sensors

Camera Sensor Material: Aluminum Magnesium

Alloy and Polycarbonate (factory sealed)

Trio Fixture Material:

Engineered Polymer

5.25 in. (133.6 mm)

Combined Weight: 5.25 lbs (2.9 kg)

Color: Black

**Compatible With:** Conduit Mount, Wall Mount, Pendant Mount, Electrical Box Adaptor, Pole Mount, Corner Mount



8.97 in. (228 mm) Depth 8.4 in. (213.3 mm)

#### **Conduit Box Mount**

Material:

Aluminum Magnesium Alloy with rubber conduit plugs

Weight:

0.93 lb (0.42 kg)

Color: Black 4.5 in. (114.4 mm) 2.53 in. (64.3 mm)

#### Pendant Mount

Material:

Aluminum Magnesium Alloy

Weight:

0.24 lb (0.11 kg)

Color:

Black

Compatible with 1.5" female interfaces

# 2.5 in. (63.6 mm) 4.44 in. (113 mm)

#### **Electrical Box Adaptor**

Material:

Aluminum Magnesium Alloy plate with Engineered Polymer trim ring

Weight:

0.21 lb (0.095 kg)

Color: Black



5.66 in. (144 mm)

#### **Duo Fixture Kit + Camera Sensors**

Camera Sensor Material: Aluminum Magnesium

Alloy and Polycarbonate (factory sealed)

**Duo Fixture Material:** Engineered Polymer 5.25 in. (133.6 mm)

Combined Weight: 3.5 lbs (1.6 kg)

Color: Black

**Compatible With:** Conduit Mount, Wall Mount, Pendant Mount, Electrical Box Adaptor, Pole Mount, Corner Mount



8.97 in. (228 mm)

Depth 4.44 in. (113 mm)

#### **Quad Fixture Kit + Camera Sensors**

**Camera Sensor Material:** Aluminum Magnesium Alloy and Polycarbonate (factory sealed)

Quad Fixture Material:

**Engineered Polymer** 

5.25 in. (133.6 mm)

Combined Weight: 7 lbs (3.2 kg)

Color: Black

**Compatible With:** Conduit Mount, Wall Mount, Pendant Mount, Electrical Box Adaptor, Pole Mount, Corner Mount



9.04 in. (229.8 mm)

Depth 9.04 in. (229.8 mm)

#### **Wall Mount**

Material:

Engineered Polymer body and Aluminum Magnesium mount Interface

Weight:

Color:

Black

1.04 lbs (0.47 kg)

Ø 4.44 in. (113 mm)



#### **In-Ceiling Mount**

Material:

Zinc-Plated Cold Rolled Steel bracket and Engineered Polymer trim ring

Weight:

0.97 lb (0.44 kg)

Color:



8.0 in. (203.4 mm

## **Ordering Information**

#### Camera Sensor

#### VNX-SN-VRS1-0

4K (8 MP) 4.42 mm - 9.51 mm P-Iris lens with 2.15x optical zoom.



#### Solo Fixture Kit

#### VNX-FX-SOBK-0

Includes solo fixture, network hub, and base. Camera sensor and mount (optional) ordered separately.



#### COMING SOON!

#### Trio Fixture Kit

#### VNX-FX-TRBK-0

Includes trio fixture, network hub, and base. Camera sensors (3) and mount ordered separately.



#### **Wall Mount**

#### VNX-AC-WBBK-0

Use this when mounting any of the fixtures on a wall. Also compatible with Conduit Box Mount.



#### **In-Ceiling Mount**

#### VNX-AC-ICBK-0

Use this when recessing a single sensor into a ceiling.



#### **Conduit Box Mount**

#### VNX-AC-CBBK-0

Use this when you need to protect the cables from the elements, vandalism, etc. Also compatible with Wall Mount.



#### COMING SOON!

#### **Pole Mount**

#### VNX-AC-PMBK-0

Use this when mounting any of the fixtures to a pole (also requires the VNX-AC-WBBK-0 Wall Mount).



#### **NEXT Edge Storage**

#### VNX-EL-SD1T-0

One 1TB card required per camera sensor for Anavio/edge recording.



#### COMING SOON!

#### **Duo Fixture Kit**

#### VNX-FX-DUBK-0

Includes duo fixture, network hub, and base. Camera sensors (2) and mount ordered separately.



#### COMING SOON!

#### **Quad Fixture Kit**

#### VNX-FX-QDBK-0

Includes quad fixture, network hub, and base. Camera sensors (4) and mount ordered separately.



#### **Pendant Mount**

#### VNX-AC-PCBK-0

Use this when suspending any of the fixtures from the ceiling. Contains industry-standard 1.5" NPT pipe thread for extending drop length.



#### **Electrical Box Adaptor**

#### VNX-AC-APBK-0

Use this adaptor plate when mounting any of the fixtures to 4S, double-gang and octagon boxes.



#### COMING SOON!

#### **Corner Mount**

#### VNX-AC-CMBK-0

Use this when mounting any of the fixtures to a corner (also requires the VNX-AC-WBBK-0 Wall Mount).



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