NEXT

MODULAR SENSOR SYSTEM

From install and setup, to AI-enhanced imaging, to advanced onboard technologies, NEXT will change your entire camera experience. The powerful AI-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 AI-powered auto-tuning, reduce installation and setup time to under 5 minutes.

Most Powerful AI 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.

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.

Practical Analytics for Real-World Problems

The straightforward suite of analytics is easy to deploy, and actively addresses some of the issues you face every day, with use cases that resonate in all verticals.

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.

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.

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.

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.

Automated Image Tuning

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

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!

Single-Step Corridor Mode

The imager automatically orients itself to corridor/hallway mode.

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.

The Base

The Network Hub

The Fixture

The Camera Sensor

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.
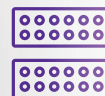
Powerful Microphones

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.

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.

Practical Analytics for Real Life

The comprehensive suite of analytics provides real-time intel so you can proactively detect and prevent incidents before they become critical situations. For example, a loitering analytic could detect a visitor waiting in the lobby, which would automatically trigger the camera's signal lightbars to turn amber, and let you communicate with the visitor via the camera's 2-way audio.

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*

Pendant	Backbox	In-Ceiling	Electrical Box	Wall

The Fixtures*

Solo	Duo	Trio	Quad

The Camera Sensors

One	Two	Three	Four

- 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!

* Single camera sensors can be surface-mounted directly to a wall or ceiling.

Pendant Mount, Solo Fixture and One Camera Sensor shown

✦ VICON

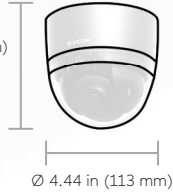# Dimensions + Construction

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

4.38 in (111.5 mm)

Ø 4.44 in (113 mm)

Duo Fixture Kit + Camera Sensors

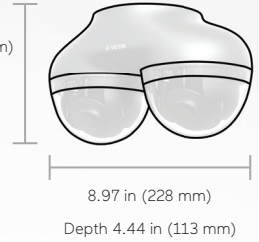**Camera Sensor Material:** Aluminum Magnesium Alloy and Polycarbonate (factory sealed)

Duo Fixture Material:
Engineered Polymer

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

5.25 in (133.6 mm)

8.97 in (228 mm)
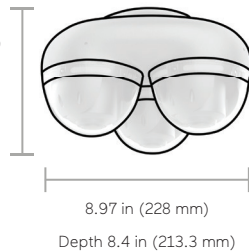
Depth 4.44 in (113 mm)

Trio Fixture Kit + Camera Sensors

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

Trio Fixture Material:
Engineered Polymer

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

5.25 in (133.6 mm)

8.97 in (228 mm)

Depth 8.4 in (213.3 mm)

Quad Fixture Kit + Camera Sensors

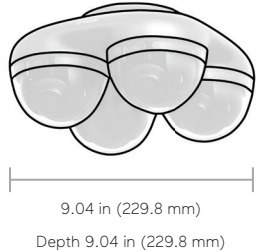**Camera Sensor Material:** Aluminum Magnesium Alloy and Polycarbonate (factory sealed)

Quad Fixture Material:
Engineered Polymer

Combined Weight: 7 lbs (3.2 Kg)

Color: Black

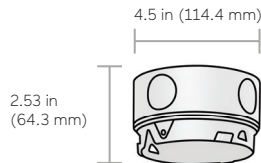**Compatible With:** Conduit Mount, Wall Mount, Pendant Mount, Electrical Box Adaptor, Pole Mount, Corner Mount

5.25 in (133.6 mm)

9.04 in (229.8 mm)

Depth 9.04 in (229.8 mm)

Conduit Box Mount

Material:
Aluminum Magnesium Alloy with rubber conduit plugs

Weight:
0.93 lb (0.42 Kg)
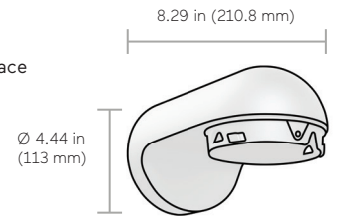
Color:
Black

4.5 in (114.4 mm)

2.53 in (64.3 mm)

Wall Mount

Material:
Engineered Polymer body and Aluminum Magnesium mount Interface

Weight:
1.04 lbs (0.47 Kg)

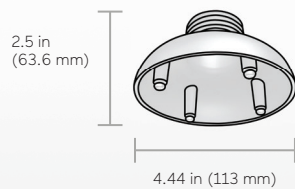**Color:**
Black

8.29 in (210.8 mm)

Ø 4.44 in (113 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)

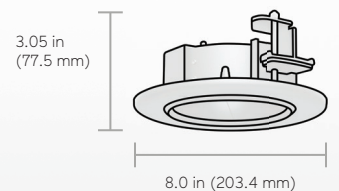## In-Ceiling Mount

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

Weight:
0.97 lb (0.44 Kg)

Color:
Black

3.05 in (77.5 mm)
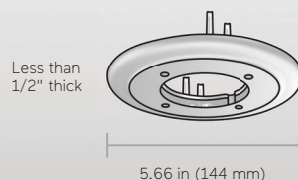
8.0 in (203.4 mm)

Electrical Box Adaptor

Material:
Aluminum Magnesium Alloy plate with Engineered Polymer trim ring

Weight:
0.21 lb (0.095 Kg)

Color:
Black

Less than 1/2" thick

5.66 in (144 mm)

Camera Sensor

System on Chip (SoC)

SoC	AI Vision Processor
Neural Net Processing	20 TOPS
Memory	2GB DDR + 4GB eMMC

Imaging

Image Sensor	1/1.8"
Resolution	Ultra HD 4K (3840 x 2160)
Image Signal Processing (ISP)	AI De-noise, Neural Net HDR
Image Settings	Automatic; self-tuning with AI signal processing
Minimum Illumination	Low-light color 0.02 lux
IR	Artificial Intelligent Retina (AI-R)
Day/Night	AI 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

Lens

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

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 (corridor) modes
Privacy Zones	8 zones

Video

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

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, tamper/blur detection, tripwire/line cross, 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) Up to 1TB per Sensor

Network Hub

System on Chip (SoC)

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

Network

Ethernet	10/100/1000 Mbps
Connector	RJ45 (IP67 coupler)
Control	Reset/Default Button

Electrical

PoE	Solo/Duo Sensor: 802.3at Trio/Quad Sensor: 802.3bt
LED Status Indicator	Power/Data Power level detection status (af, at, bt)

Alarms

Input/Output	1 dry contact/1 dry relay output (terminal block at pigtail)

System Camera Sensor + Network Hub

General

Power Consumption	Solo: 15 W (802.3at)	Trio: 32 W (802.3bt)
	Duo: 23.5 W (802.3at)	Quad: 40 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, Provisioned for FIPS-140/OWASP compliance

Account Management	Multiple user groups (10 admin/operator/user)
Profile Management	User configurations import/export
Firmware Update	Web update, PRONTO, 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 and EN 63000-2018; EU Directive 2015/863/EU
UL	UL 62368-1 and CSA C22.2 No. 62368-1:19
Country of Origin	Taiwan
Warranty	5 Years

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.

microSDXC

VNX-EL-SD1T-0
One 1TB card required per camera
sensor.

Solo Fixture Kit

VNX-FX-SOBK-0
Includes solo fixture, network hub,
and base. Camera sensor and mount
(optional) ordered separately.

Duo Fixture Kit

COMING SOON!

VNX-FX-DUBK-0
Includes duo fixture, network hub,
and base. Camera sensors (2) and
mount ordered separately.

Trio Fixture Kit

COMING SOON!

VNX-FX-TRBK-0
Includes trio fixture, network hub,
and base. Camera sensors (3)
and mount ordered separately.

Quad Fixture Kit

COMING SOON!

VNX-FX-QDBK-0
Includes quad fixture, network hub,
and base. Camera sensors (4) and
mount ordered separately.

Wall Mount

VNX-AC-WBBK-0
Use this when mounting any
of the fixtures on a wall.

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.

In-Ceiling Mount

VNX-AC-ICBK-0
Use this when recessing a single
sensor into a ceiling.

Electrical Box Adaptor

VNX-AC-APBK-0
Use this adaptor plate when
mounting any of the fixtures to 4S,
double-gang and octagon boxes.

Conduit Box Mount

VNX-AC-CBBK-0
Use this when you need to
protect the cables from the
elements, vandalism, etc.

Corner Mount

COMING SOON!

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

Pole Mount

COMING SOON!

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

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