

**VISHEEN**

# CAMERA MODULE PRODUCT PORTFOLIO

**2024 H2**



[viewsheen.com](http://viewsheen.com)

# About VISHEEN

Leading Provider of Long-Range  
and Multispectral Cameras

**50+**

Countries and Regions

**# 1**

Super long-range camera  
module Market share

**40%+**

Overseas Market Consumption

**60%+**

R&D Ratio

Founded in 2016, **Hangzhou View Sheen Technology Co., Ltd.** is a national high-tech enterprise specializing in the development of zoom camera modules. With over 60% of our employees dedicated to R&D and 60%-80% of our annual net profit invested in innovation, we have established ourselves as a global leader in zoom camera technology. Our expertise extends beyond the visible and NIR bands, encompassing LWIR, SWIR, and MWIR as well. We are also at the forefront of AI algorithm development, leveraging its power to enhance our camera solutions. View Sheen Technology's camera modules are renowned for their superior performance and reliability, serving a diverse range of applications, including: UAV/Drone and Robot, Fire Detection and Electrical Inspection, Surveillance and Security, Search and Rescue, Marine and Land Navigation

With a global presence spanning over 50 countries and regions, View Sheen Technology is committed to providing innovative, complete, and customer-centric solutions that empower our partners to achieve their goals.

- 
- **2016**  
Foundation and Launched the UAV gimbal camera module
  - **2017**  
Launched the first generation of long range camera modules
  - **2018**  
Launched the world's first 540mm long range camera module
  - **2019**  
Launched the world's first 4MP 920mm ultra long range camera module
  - **2020**  
Launched industry's first single IP dual-channel EO/IR camera module
  - **2021**  
Launched the world's first 850mm OIS(Optical Image Stabilization) ultra long range camera module  
Successfully obtained ISO9001 quality system certification
  - **2022**  
Launched the world's first SVGA resolution 510mm with 30x optical zoom SWIR camera module  
Launched the industry's longest focal length 350mm 7x optical zoom SVGA LWIR thermal module
  - **2023**  
Launched the world's first AI-ISP color-view 550mm long range camera module  
The shipment volume of camera module over 750mm focal lens ranks first in the industry
  - **2024**  
Launched the world's first 4MP 1200mm ultra long range camera module

# Contents



## 01 / Technology

- 06 Core Technology
- 08 AI Analytics
- 09 System Integrations
- 10 Super Long Range
- 11 VMAGE AI-ISP | 
- 12 NDAA
- 13 EO/IR

## 02 / Products

- 15 Zoom Camera Module
- 16 SCZ-K Series
- 16 SCZ-800 Series
- 17 SCZ-300 Series
- 19 SCZ-200 Series
- 20 SCZ-100 Series
- 22 SCZ-C Series
- 23 UAZ Series

### 24 Thermal Module

- 25 Uncooled LWIR
- 27 Cooled MWIR
- 28 EO/IR

### 30 SWIR Camera Module

- 32 Drone Gimbal Camera
- 33 Visible
- 34 EO/IR

### 35 Accessory

- 35 Laser IR Illuminator
- 35 Laser Range Finder
- 35 Camera Expansion Board

The background of the slide features a dark, abstract design. It consists of several concentric, glowing blue circles that radiate outwards from the center. In the upper left area, there is a bright, overexposed circular light source, possibly representing a lens flare or a camera sensor. The overall aesthetic is modern and technological.

01

Technology

# Core Technology

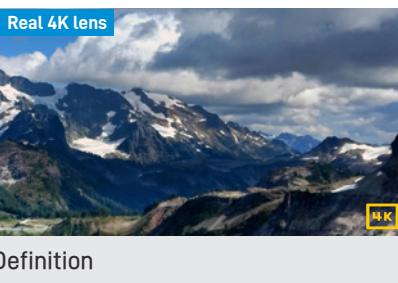
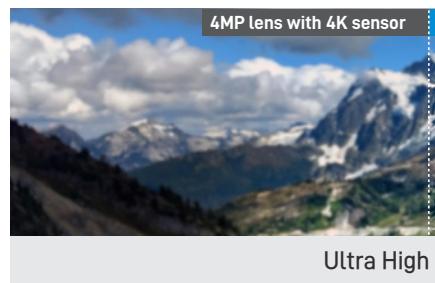
## 01/ Advanced Optical Design



Super Long Range



NIR Optical Defog



Ultra High Definition



Temperature Compensation



Optical Image Stabilization



Optical Axis Consistency



## 02/ High-Speed AF System



### High Accuracy Focusing System

Stepping motor + Screw drive  
0.01mm high-precision



### Advanced Focusing Algorithm

Full-range clear zoom technology



### Super Long Focus&Zoom Life

## 03/ Advanced Image Sensor

**STARVIS**

**STARVIS 2**

**Pregius**

**SenSWIR**

## 04/ VMAGE AI-ISP



**VMAGE**

### Color View | VMAGE

AI NR, SNR increased by 4 times in low-light scenes

### HDR | VMAGE

AI HDR, Dynamic range increased by 12dB in high-contrast scenes

# AI Analytics

## 01/ Perimeter Intrusion Detection



Tripwire

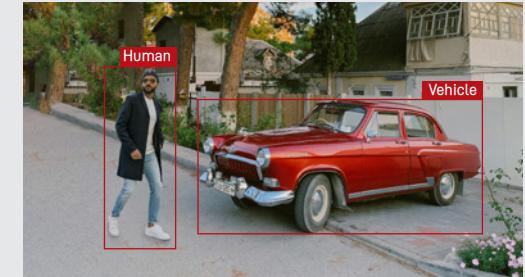


Virtual Fence



Area Intrusion

## 02/ Human & Vehicle Detection and Classification



## 03/ Fire Prevention



Fire &amp; Smoke Detection

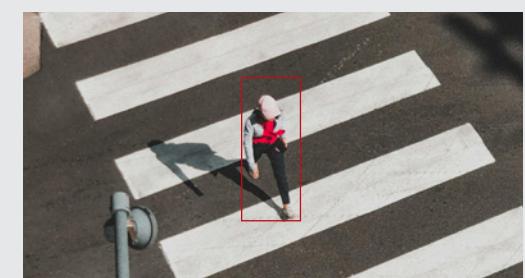


Smoking &amp; Calling Detection



Fire Detection

## 04/ Smart Tracking



## 05/ Abnormal Behavior Detection



Loitering Detection



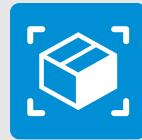
Fast Moving



Crowd Gathering



Parking Detection



Abandoned Object



Missing Object

# System Integrations

## Interoperability

ONVIF

API

SDK

VISCA

PELCO

## Video Connectivity

Out ETHERNET/MIPI/LVDS

In BT601/USB

ONE IP  
BISPECTRAL SOLUTION

## Cybersecurity



## NDAA Compliant



# Super Long Range

## Redefining Surveillance Boundaries

When perimeter security demands extend beyond conventional limits, VISHEEN's ultra-long-range zoom camera modules emerge as the undisputed solution. Our cutting-edge technology empowers you to safeguard vast areas with unparalleled clarity and dependability.



### SCZ-K Series

VS-SCZ4060VIE-8

### Uncooled LWIR

VS-SCMA3507NR2-D

### SCZ-800 Series

VS-SCZ8052KI-8

VS-SCZ4052YI0-8

VS-SCZ2057YI0-8

VS-SCZ3052NIO-G

### Cooled MWIR

VS-MIM6900ANPF-D

### SWIR

VS-MIZA030NM

### Unmatched Coverage

Experience industry-leading zoom capabilities that extend surveillance horizons beyond 10KM, ensuring comprehensive coverage of expansive perimeters.

### Exceptional Versatility

Choose from visible, uncooled long-wave infrared (LWIR), and cooled mid-wave infrared (MWIR) options to optimize surveillance for diverse environments and applications.

### Unwavering Reliability

Our robust modules are engineered to withstand the harshest conditions, delivering unwavering performance for mission-critical surveillance tasks.

# VMAGE AI-ISP



Harness the power of artificial intelligence (AI) to elevate your surveillance capabilities with our cutting-edge VMAGE AI ISP. Our AI-powered solutions deliver exceptional image quality and advanced analytics, empowering you to safeguard your world with unprecedented clarity and intelligence.



## VMAGE AI-ISP Series

|                 |                 |
|-----------------|-----------------|
| VS-SCZ2010YIE   | VS-SCZ4052YIO-8 |
| VS-SCZ2057YIO-8 | VS-SCZ4060VIE-8 |
| VS-SCZ4037YIB-8 | VS-SCZ5032YIE   |
| VS-SCZ4055VIE-8 | VS-SCZ8050VIE-8 |

### AI-Enhanced Image Processing

**AI Noise Reduction:** Experience pristine images, free from distracting noise, even in low-light conditions.

**AI Wide Dynamic Range:** Capture exceptional detail in scenes with extreme lighting variations.

### AI-Driven Image Recognition

**Person/Vehicle Detection:** Identify and track people and vehicles with unmatched accuracy.

**Behavior Recognition:** Uncover suspicious activities and potential threats in real time.

### Unleash the Power of AI for Surveillance Excellence

**Enhanced Situational Awareness:** Gain real-time insights into your surroundings, enabling proactive security measures.

**Reduced False Alarms:** Minimize disruptions and optimize resource allocation.



# NDAA

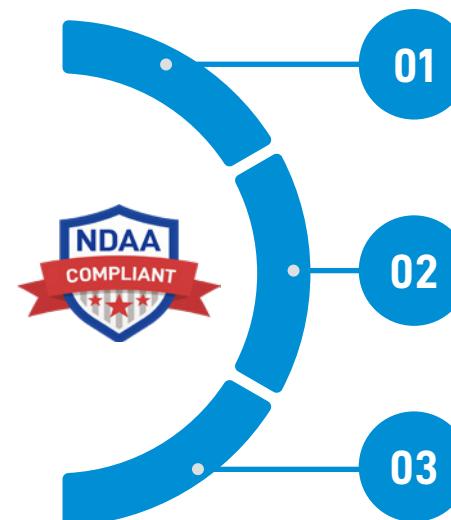
Ensure unwavering security and compliance in critical environments with our NDAA-compliant camera modules. Our rigorously tested solutions adhere to stringent NDAA standards, empowering you to protect sensitive data and infrastructure with utmost confidence.

## NDAA Series

|                  |                  |
|------------------|------------------|
| VS-SCZ8052KI-8   | VS-SCZ/UAZ8010KI |
| VS-SCZ4037KI-8   | VS-SCZ/UAZ8003K  |
| VS-SCZ2044KI-8   |                  |
| VS-SCZ2030KM     |                  |
| VS-SCZ/UAZ8020KI |                  |



## NDAA Compliance for Uncompromised Security



### Meet Government Requirements

Comply with NDAA regulations for government and defense applications.

### Protect Critical Assets

Safeguard sensitive information and infrastructure from unauthorized access.

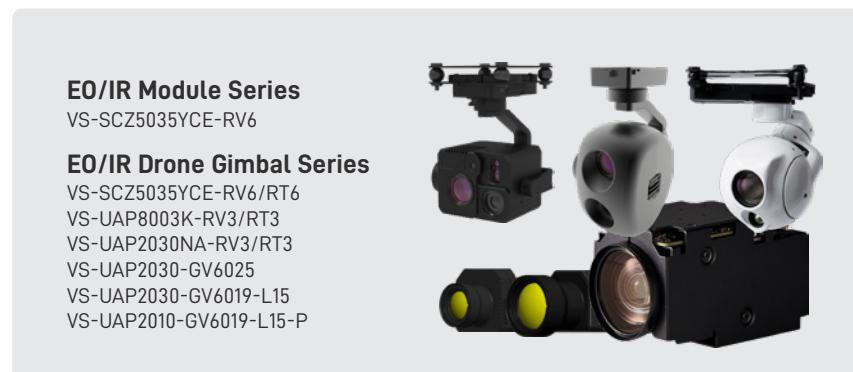
### Experience Peace of Mind

Operate with the assurance of robust security measures.



# EO/IR

Experience the pinnacle of bi-spectrum surveillance with EO/IR series, featuring our groundbreaking "single IP dual channels" integration. Our innovative technology seamlessly combines visible light and thermal imaging modules into a single dual-optical module, accessible through a single IP address for effortless control and synchronized video streaming.



## EO/IR Module Series

VS-SCZ5035YCE-RV6

## EO/IR Drone Gimbal Series

VS-SCZ5035YCE-RV6/RT6

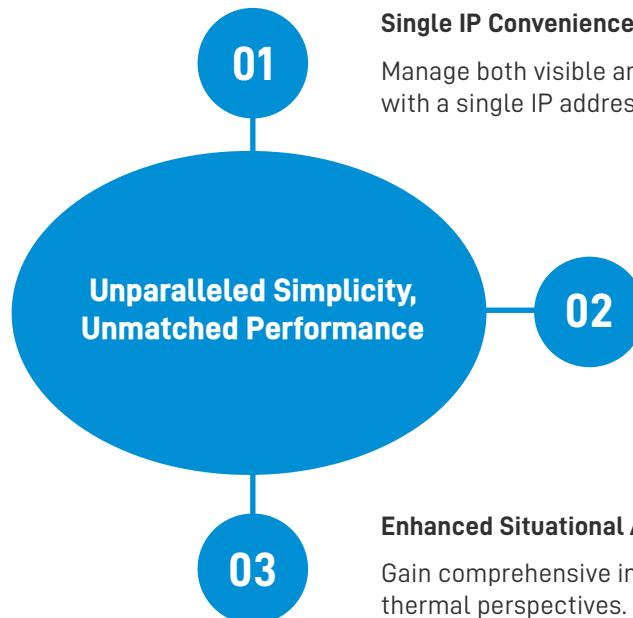
VS-UAP8003K-RV3/RT3

VS-UAP2030NA-RV3/RT3

VS-UAP2030-GV6025

VS-UAP2030-GV6019-L15

VS-UAP2010-GV6019-L15-P



01

### Single IP Convenience

Manage both visible and thermal imaging streams with a single IP address.

02

### Seamless Integration

Simplify system integration and reduce cabling requirements.

03

### Enhanced Situational Awareness

Gain comprehensive insights from both visual and thermal perspectives.

# 02

# Products

# Zoom Camera Module

## Elevate Your Surveillance with VISHEEN'S Versatile Zoom Camera Modules

Engineered to meet the demands of modern security systems, our zoom camera modules offer exceptional performance and flexibility. With a wide range of resolutions from 2MP to 8MP and focal lengths up to 1200mm, our modules cater to diverse surveillance needs.



### Advanced Features for Superior Performance

- Global Shutter:** Eliminate motion blur for crystal-clear images.
- Optical Image Stabilization (OIS):** Ensure steady footage, even in challenging conditions.
- AI Image Processing:** leverages deep learning to significantly enhance image quality, reducing noise, expanding dynamic range, and delivering more detailed image.

### Seamless Integration and Customization

- Flexible Interfaces:** Choose from MIPI, LVDS, and network interfaces for easy integration.
- Industry Standards:** Support VISCA/PELCO and ONVIF protocols for compatibility with existing systems.
- Tailored Solutions:** Our modules can be customized to meet your specific requirements.

## SCZ-K Series



## SCZ-800 Series



|                                     | VS-SCZ4060VIB-8   | VS-SCZ8088NM-8   | VS-SCZ4088NM-8   | VS-SCZ8052KI-8  | VS-SCZ4052YIO-8   |
|-------------------------------------|---|--|--|---|---|
| <b>Image Sensor</b>                 | 1/1.8" 4MP CMOS <b>STARVIS 2</b>  | 1/1.8" 8MP CMOS <b>STARVIS</b>   | 1/1.8" 4MP CMOS <b>STARVIS</b>   | 1/1.8" 8MP CMOS <b>STARVIS 2</b>  | 1/1.8" 4MP CMOS <b>STARVIS</b>  |
| <b>Focal Length</b>                 | 20 - 1200mm, 60x Optical  | 11.3 - 1000mm, 88x Optical   | 10.8 - 950mm, 88x Optical  | 15 - 775mm, 52x Optical   | 15 - 775mm, 52x Optical   |
| <b>Max. Aperture</b>                | F2.9 - F11  | F2.1 - F8.1  | F2.1 - F7.5  | F2.8 - F8.2   | F2.8 - F8.2   |
| <b>Angle of View</b>                | HFoV: 22.1° - 0.37°<br>VFoV: 12.6° - 0.21°  | HFoV: 37.5° - 0.44°<br>VFoV: 21.6° - 0.25°                                     | HFoV: 39.7° - 0.47°<br>VFoV: 23.1° - 0.27°                                     | HFoV: 28.7° - 0.57°<br>VFoV: 16.4° - 0.32°  | HFoV: 29.1° - 0.58°<br>VFoV: 16.7° - 0.33°  |
| <b>Min. Illumination</b>            | Color: 0.01Lux/F2.9   | Color: 0.1Lux/F2.1   | Color: 0.05Lux/F2.1  | Color: 0.05Lux/F2.8   | Color: 0.01Lux/F2.8   |
| <b>Max. Resolution / Frame Rate</b> | Network: 2688x1520 (4MP)@50/60fps<br>MIPI: 2688x1520 (4MP)@50/60fps   | Network: 3840x2160 (4K)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps           | Network: 2688x1520 (4MP)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps          | Network: 3840x2160 (4K)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps  | Network: 2688x1520 (4MP)@50/60fps<br>MIPI: 2688x1520 (4MP)@50/60fps   |
| <b>Image Stabilization</b>          | EIS(built-in gyro sensor)   | EIS  | EIS  | EIS   | OIS + EIS(built-in gyro sensor)   |
| <b>Defog</b>                        | Optical (NIR) + Digital   | Optical (NIR) + Digital  | Optical (NIR) + Digital  | Optical (NIR) + Digital   | Optical (NIR) + Digital   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>                 | 10/100M Ethernet, MIPI  | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS  | 10/100M Ethernet, MIPI  |
| <b>Thermal Image Input</b>          | BT601/USB   | USB  | USB  | USB   | BT601/USB   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>                        | 9V - 12VDC: Typical 4.8W, Max 10.2W   | 9V - 12VDC: Typical 6.5W, Max 8.4W   | 9V - 12VDC: Typical 6.5W, Max 8.4W   | 9V - 12VDC: Typical 4W, Max 9.5W  | 9V - 12VDC: Typical 4.5W, Max 9.8W  |
| <b>Dimensions(LxWxH)</b>            | 400 x 125 x 125mm   | 381 x 150 x 142.5mm  | 381 x 150 x 142.5mm  | 320 x 109 x 109mm   | 320 x 109 x 109mm   |
| <b>Weight</b>                       | 5.2kg   | 5.6kg  | 5.6kg  | 3.1kg   | 3.2kg   |
| <b>DORI Distance(M)*</b>            | 16552 / 6568 / 3310 / 1655  | 2000 / 7937 / 4000 / 2000  | 13103 / 5200 / 2621 / 1310   | 15500 / 6151 / 3100 / 1550  | 10690 / 4242 / 2138 / 1069  |
| <b>Special Features</b>             | AI-ISP, 40g Shock   | 4K   | /  | 4K, NDAA  | AI-ISP, Optical Image Stabilization   |

| SCZ-800 Series                      |   |  |   |   | SCZ-300 Series  |
|-------------------------------------|---|--|---|---|---|
|                                     |    |  |  |    |    |
|                                     | VS-SCZ2057YI0-8   | VS-SCZ4052NM-8   | VS-SCZ2057NM-8  | VS-SCZ3052NIO-G   | VS-SCZ8040VIE-8   |
| <b>Image Sensor</b>                 | 1/1.8" 4MP CMOS<br><b>STARVIS</b>   | 1/1.8" 4MP CMOS<br><b>STARVIS</b>  | 1/1.8" 4MP CMOS<br><b>STARVIS</b>   | 1/1.8" 3MP CMOS<br><b>Pregius</b>   | 1/1.2" 8MP CMOS   |
| <b>Focal Length</b>                 | 15 - 855mm, 57x Fusion Zoom   | 15 - 775mm, 52x Optical  | 15 - 855mm, 57x Fusion Zoom   | 15 - 775mm, 52x Optical   | 10 - 400mm, 40x Optical   |
| <b>Max. Aperture</b>                | F2.8 - F8.2   | F2.8 - F8.2  | F2.8 - F8.2   | F2.8 - F8.2   | F1.5 - F5.5   |
| <b>Angle of View</b>                | HFoV: 29.1° - 0.53°<br>VFoV: 16.7° - 0.3°   | HFoV: 29.1° - 0.58°<br>VFoV: 16.7° - 0.33°   | HFoV: 29.1° - 0.53°<br>VFoV: 16.7° - 0.3°   | HFoV: 26.5° - 0.52°<br>VFoV: 20° - 0.39°  | HFoV: 58.2° - 1.6°<br>VFoV: 34.8° - 0.9°  |
| <b>Min. Illumination</b>            | Color: 0.01Lux/F2.8   | Color: 0.05Lux/F2.8  | Color: 0.05Lux/F2.8   | Color: 0.05Lux/F2.8   | Color: 0.001Lux/F1.5  |
| <b>Max. Resolution / Frame Rate</b> | Network: 1920x1080 (1080P)@50/60fps<br>MIPI: 1920x1080 (1080P)@50/60fps   | Network: 2688x1520 (4MP)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps              | Network: 1920x1080 (1080P) @25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps            | Network: 2048x1536 (3MP)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps   | Network: 3840x2160 (4K)@25/30fps<br>MIPI: 3840x2160 (4K)@25/30fps   |
| <b>Image Stabilization</b>          | OIS + EIS(built-in gyro sensor)   | EIS  | EIS   | OIS + EIS   | EIS(built-in gyro sensor)   |
| <b>Defog</b>                        | Optical (NIR) + Digital   | Optical (NIR) + Digital  | Optical (NIR) + Digital   | Optical (NIR) + Digital   | Optical (NIR) + Digital   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking     | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking      | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>                 | 10/100M Ethernet, MIPI  | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS  | 10/100M Ethernet, LVDS  | 10/100M Ethernet, MIPI  |
| <b>Thermal Image Input</b>          | BT601/USB   | USB  | USB   | USB   | BT601/USB   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>                        | 9V - 12VDC: Typical 4.5W, Max 9.8W  | 9V - 12VDC: Typical 4W, Max 9.5W   | 9V - 12VDC: Typical 4W, Max 9.5W  | 9V - 12VDC: Typical 4W, Max 9.5W  | 9V - 12VDC: Typical 5.5W, Max 10.5W   |
| <b>Dimensions(LxWxH)</b>            | 320 x 109 x 109mm   | 320 x 109 x 109mm  | 320 x 109 x 109mm   | 320 x 109 x 109mm   | 178 x 77.4 x 83.5mm   |
| <b>Weight</b>                       | 3.2kg   | 3.1kg  | 3.1kg   | 3.1kg   | 1.1kg   |
| <b>DORI Distance(M)*</b>            | 10690 / 4242 / 2138 / 1069  | 10690 / 4242 / 2138 / 1069   | 10690 / 4242 / 2138 / 1069  | 8986 / 3566 / 1797 / 899  | 6897 / 2737 / 1379 / 690  |
| <b>Special Features</b>             | AI-ISP, Optical Image Stabilization   | /  | /   | Global Shutter  | 4K, AI-ISP, ColorView, 40g Shock  |

## SCZ-300 Series



VS-SCZ4055VIE-8

VS-SCZ8050NM-8

VS-SCZ2090NM-8

VS-SCZ4050NM-8

VS-SCZ2068NM-8

|                                     |   |  |  |  |  |
|-------------------------------------|---|--|--|--|--|
| <b>Image Sensor</b>                 | 1/1.2" 8MP CMOS   | 1/1.8" 8MP CMOS <b>STARVIS</b>   | 1/1.8" 8MP CMOS <b>STARVIS</b>   | 1/1.8" 4MP CMOS <b>STARVIS</b>   | 1/1.8" 4MP CMOS <b>STARVIS</b>   |
| <b>Focal Length</b>                 | 10 - 550mm, 55x Fusion Zoom   | 6 - 300mm, 50x Optical   | 6 - 540mm, 90x Fusion Zoom   | 6 - 300mm, 50x Optical   | 6 - 408mm, 68x Fusion Zoom   |
| <b>Max. Aperture</b>                | F1.5 - F5.5   | F1.4 - F4.5  | F1.4 - F4.5  | F1.4 - F4.5  | F1.4 - F4.5  |
| <b>Angle of View</b>                | HFoV: 58.2° - 1.16°<br>VFoV: 34.8° - 0.65°  | HFoV: 65.2° - 1.4°<br>VFoV: 39.6° - 0.8°                                       | HFoV: 65.2° - 0.8°<br>VFoV: 39.6° - 0.4°                                       | HFoV: 66° - 1.4°<br>VFoV: 40.3° - 0.8°   | HFoV: 66° - 1.1°<br>VFoV: 40.3° - 0.6°   |
| <b>Min. Illumination</b>            | Color: 0.001Lux/F1.5  | Color: 0.01Lux/F1.4  | Color: 0.01Lux/F1.4  | Color: 0.005Lux/F1.4   | Color: 0.005Lux/F1.4   |
| <b>Max. Resolution / Frame Rate</b> | Network: 2688x1520 (4MP)@25/30fps<br>MIPI: 2688x1520 (4MP)@25/30fps   | Network: 3840x2160 (4K)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps           | Network: 1920x1080 (1080P)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps        | Network: 2688x1520 (4MP)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps          | Network: 1920x1080 (1080P)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps        |
| <b>Image Stabilization</b>          | EIS(built-in gyro sensor)   | EIS  | EIS  | EIS  | EIS  |
| <b>Defog</b>                        | Optical (NIR) + Digital   | Optical (NIR) + Digital  | Optical (NIR) + Digital  | Optical (NIR) + Digital  | Optical (NIR) + Digital  |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking |
| <b>Video Output</b>                 | 10/100M Ethernet, MIPI  | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   |
| <b>Thermal Image Input</b>          | BT601/USB   | USB  | USB  | USB  | USB  |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out   |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)  |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB   |
| <b>Power</b>                        | 9V - 12VDC: Typical 5.5W, Max 10.5W   | 9V - 12VDC: Typical 5W, Max 6W   | 9V - 12VDC: Typical 4.2W, Max 7.3W   | 9V - 12VDC: Typical 4.5W, Max 5.5W   | 9V - 12VDC: Typical 5W, Max 6W   |
| <b>Dimensions(LxWxH)</b>            | 178 x 77.4 x 83.5mm   | 175.3 x 72.2 x 77.3mm  |
| <b>Weight</b>                       | 1.1kg   | 900g   | 900g   | 900g   | 900g   |
| <b>DORI Distance(M)*</b>            | 6897 / 2737 / 1379 / 690  | 6000 / 2381 / 1200 / 600   | 6000 / 2381 / 1200 / 600   | 4138 / 1642 / 828 / 414  | 4138 / 1642 / 828 / 414  |
| <b>Special Features</b>             | AI-ISP, ColorView, 40g Shock  | 4K   | /  | /  | /  |

| SCZ-300 Series  |  |   | SCZ-200 Series  |   |   |
|---|--|---|---|---|---|
|  |  |    |    |    |   |
| VS-SCZ3050NM-8  | VS-SCZ2058KI0-8  | VS-SCZ8037KI-8  | VS-SCZ4037YIB-8   | VS-SCZ4037KI-8  |   |
| <b>Image Sensor</b>   | 1/1.8" 3MP CMOS<br><b>Pregius</b>  | 1/1.8" 4MP CMOS<br><b>STARVIS</b>   | 1/1.8" 8MP CMOS<br><b>STARVIS 2</b>   | 1/1.8" 4MP CMOS<br><b>STARVIS</b>   | 1/1.8" 4MP CMOS<br><b>STARVIS</b>   |
| <b>Focal Length</b>   | 6 - 300mm, 50x Optical   | 6.3 - 365mm, 58x Fusion Zoom  | 6.5 - 240mm, 37x Optical  | 6.5 - 240mm, 37x Optical  | 6.5 - 240mm, 37x Optical  |
| <b>Max. Aperture</b>  | F1.4 - F4.5  | F1.5 - F6.4   | F1.5 - F4.8   | F1.5 - F4.8   | F1.5 - F4.8   |
| <b>Angle of View</b>  | HFoV: 60.9° - 1.3°<br>VFoV: 47.6° - 1.0°   | HFoV: 63.4° - 1.2°<br>VFoV: 38.3° - 0.6°  | HFoV: 61.1° - 1.8°<br>VFoV: 36.7° - 1.0°  | HFoV: 61.9° - 1.9°<br>VFoV: 37.4° - 1.0°  | HFoV: 61.9° - 1.9°<br>VFoV: 37.4° - 1.0°  |
| <b>Min. Illumination</b>  | Color: 0.002Lux/F1.4   | Color: 0.005Lux/F1.5  | Color: 0.01Lux/F1.5   | Color: 0.001Lux/F1.5  | Color: 0.005Lux/F1.5  |
| <b>Max. Resolution / Frame Rate</b>   | Network: 2048x1536 (3MP)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps              | Network: 1920x1080 (1080P)@50/60fps<br>LVDS: 1920x1080 (1080P)@50/60fps   | Network: 3840x2160 (4K)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps  | Network: 2688x1520 (4MP)@50/60fps<br>MIPI: 2688x1520 (4MP)@50/60fps   | Network: 2688x1520 (4MP)@50/60fps<br>LVDS: 1920x1080 (1080P)@25/30fps   |
| <b>Image Stabilization</b>  | EIS  | OIS + EIS   | EIS   | EIS(built-in gyro sensor)   | EIS   |
| <b>Defog</b>  | Optical (NIR) + Digital  | Optical (NIR) + Digital   | Optical (NIR) + Digital   | Optical (NIR) + Digital   | Optical (NIR) + Digital   |
| <b>Analytics</b>  | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking     | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS  | 10/100M Ethernet, LVDS  | 10/100M Ethernet, MIPI  | 10/100M Ethernet, LVDS  |
| <b>Thermal Image Input</b>  | USB  | USB   | BT601   | BT601/USB   | BT601/USB   |
| <b>Audio</b>  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>   | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>  | 9V - 12VDC: Typical 5W, Max 6W   | 9V - 12VDC: Typical 3.5W, Max 7.1W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  |
| <b>Dimensions(LxWxH)</b>  | 175.3 x 72.2 x 77.3mm  | 145 x 82 x 96mm   | 138 x 66 x 76mm   | 138 x 66 x 76mm   | 138 x 66 x 76mm   |
| <b>Weight</b>   | 900g   | 930g  | 620g  | 620g  | 620g  |
| <b>DORI Distance(M)*</b>  | 3478 / 1380 / 696 / 348  | 3972 / 1577 / 794 / 397   | 4800 / 1905 / 960 / 480   | 3310 / 1314 / 662 / 331   | 3310 / 1314 / 662 / 331   |
| <b>Special Features</b>   | Global Shutter   | NDAA, Optical Image Stabilization   | 4K, NDAA  | AI-ISP, ColorView   | NDAA  |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

| SCZ-200 Series                      |   | SCZ-100 Series  |   |   |   |
|-------------------------------------|---|---|---|---|---|
|                                     |    |    |    |    |  |
|                                     | <b>VS-SCZ2044KI-8</b>   | <b>VS-SCZ8020KI</b>   | <b>VS-SCZ4020KI</b>   | <b>VS-SCZ5035YCE-5004</b>   |   |
| <b>Image Sensor</b>                 | 1/1.8" 4MP CMOS <b>STARVIS</b>  | 1/1.8" 8MP CMOS <b>STARVIS 2</b>  | 1/1.8" 4MP CMOS <b>STARVIS</b>  | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  |
| <b>Focal Length</b>                 | 6.9 - 303mm, 44x Fusion Zoom  | 6.5 - 130mm, 20x Optical  | 6.5 - 130mm, 20x Optical  | Zoom: 4.8 - 168mm, 35x Optical  | Panoramic: 4mm  |
| <b>Max. Aperture</b>                | F1.5 - F4.8   | F1.5 - F4.0   | F1.5 - F4.0   | F1.6 - F4.4   | F1.0  |
| <b>Angle of View</b>                | HFOV: 58.9° - 1.5°<br>VFOV: 35.4° - 0.8°  | HFOV: 61.1° - 3.4°<br>VFOV: 36.7° - 1.9°  | HFOV: 61.8° - 3.4°<br>VFOV: 37.4° - 1.9°  | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°  | FoV: 78.8° x 55.8°  |
| <b>Min. Illumination</b>            | Color: 0.005Lux/F1.5  | Color: 0.01Lux/F1.5   | Color: 0.005Lux/F1.5  | Color: 0.001Lux/F1.6  | Color: 0.0001Lux/F1.0   |
| <b>Max. Resolution / Frame Rate</b> | Network: 1920x1080 (1080P)@50/60fps<br>LVDS: 1920x1080 (1080P)@25/30fps   | Network: 3840x2160 (4K)@25/30fps  | Network: 2688x1520 (4MP)@50/60fps   | Network: 2560*1920@25fps,<br>2560*1440@25/30fps   | Network: 2560*1920@25fps,<br>2560*1440@25/30fps                                     |
| <b>Image Stabilization</b>          | EIS   | EIS   | EIS   | EIS   |   |
| <b>Defog</b>                        | Optical (NIR) + Digital   | Digital   | Digital   | Digital   |   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |   |
| <b>Video Output</b>                 | 10/100M Ethernet, LVDS  | 10/100M Ethernet  | 10/100M Ethernet  | 10/100M Ethernet  |   |
| <b>Thermal Image Input</b>          | BT601/USB   | BT601/USB   | BT601/USB   | BT601/USB   |   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  |   |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)   |   |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Built-in EMMC 50GB  |   |
| <b>Power</b>                        | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.2W, Max 5.8W  |   |
| <b>Dimensions(LxWxH)</b>            | 138 x 66 x 76mm   | 97.2 x 52.2 x 60.3mm  | 97.2 x 52.2 x 60.3mm  | 96.3 x 52 x 58.6mm  | 27.9 x 34 x 34mm  |
| <b>Weight</b>                       | 620g  | 330g  | 330g  | 300g  |   |
| <b>DORI Distance(M)*</b>            | 3310 / 1314 / 662 / 331   | 2600 / 1032 / 520 / 260   | 1793 / 712 / 359 / 179  | 3360 / 1333 / 672 / 336   |   |
| <b>Special Features</b>             | NDAA  | 4K, NDAA  | NDAA  | AI-ISP, ColorView   |   |

## SCZ-100 Series



VS-SCZ5035YCE



VS-SCZ5032YIE



VS-SCZ4025KI



VS-SCZ4025KM



VS-SCZ2032KI

|                                     |   |   |   |  |   |
|-------------------------------------|---|---|---|--|---|
| <b>Image Sensor</b>                 | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  | 1/2.9" 4MP CMOS   | 1/2.9" 4MP CMOS  | 1/2.8" 2MP CMOS <b>STARVIS</b>  |
| <b>Focal Length</b>                 | 4.8 - 168mm, 35x Optical  | 4.7 - 150mm, 32x Optical  | 5 - 125mm, 25x Optical  | 5 - 125mm, 25x Optical   | 4.7 - 150mm, 32x Optical  |
| <b>Max. Aperture</b>                | F1.6 - F4.4   | F1.6 - F4.3   | F1.5 - F3.8   | F1.5 - F3.8  | F1.5 - F4.0   |
| <b>Angle of View</b>                | HFoV: 56.1° - 1.75°<br>VFoV: 43.6° - 1.31°  | HFoV: 57.1° - 1.96°<br>VFoV: 44.4° - 1.47°  | HFoV: 56.5° - 2.4°<br>VFoV: 33.8° - 1.3°  | HFoV: 56.5° - 2.4°<br>VFoV: 33.8° - 1.3°                                       | HFoV: 61.3° - 2.25°<br>VFoV: 36.9° - 1.27°  |
| <b>Min. Illumination</b>            | Color: 0.001Lux/F1.6  | Color: 0.001Lux/F1.6  | Color: 0.05Lux/F1.5   | Color: 0.05Lux/F1.5  | Color: 0.005Lux/F1.5  |
| <b>Max. Resolution / Frame Rate</b> | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps   | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps   | Network: 2688x1520 (4MP)@50/60fps   | Network: 2688x1520 (4MP)@25/30fps  | Network: 1920x1080 (1080P)@50/60fps   |
| <b>Image Stabilization</b>          | EIS   | EIS   | EIS   | EIS  | EIS   |
| <b>Defog</b>                        | Digital   | Digital   | Digital   | Digital  | Digital   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>                 | 10/100M Ethernet  | 10/100M Ethernet  | 10/100M Ethernet  | 10/100M Ethernet   | 10/100M Ethernet  |
| <b>Thermal Image Input</b>          | BT601/USB   | BT601/USB   | USB   | -  | USB   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>                 | Built-in EMMC 50GB  | Expanding Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>                        | 9V - 12VDC: Typical 3.2W, Max 4.8W  | 9V - 12VDC: Typical 3.2W, Max 4.8W  | 9V - 12VDC: Typical 2.6W, Max 4.3W  | 9V - 12VDC: Typical 2.6W, Max 4.3W   | 9V - 12VDC: Typical 2.5W, Max 4.5W  |
| <b>Dimensions(LxWxH)</b>            | 96.3 x 52 x 58.6mm  | 96.3 x 52 x 58.6mm  | 96.3 x 52 x 58.6mm  | 96.3 x 52 x 58.6mm   | 96.3 x 52 x 58.6mm  |
| <b>Weight</b>                       | 300g  | 300g  | 266g  | 266g   | 300g  |
| <b>DORI Distance(M)*</b>            | 3360 / 1333 / 672 / 336   | 3000 / 1190 / 600 / 300   | 2566 / 1018 / 513 / 256   | 2566 / 1018 / 513 / 256  | 1945 / 772 / 389 / 194  |
| <b>Special Features</b>             | AI-ISP, ColorView   | AI-ISP, ColorView   | NDAA, High FPS  | NDAA   | NDAA  |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

| SCZ-100 Series                      |  | SCZ-C Series  |   |   |   |   |
|-------------------------------------|--|---|---|---|---|---|
|                                     |  |    |    |    |  |  |
| VS-SCZ2030KM                        | VS-SCZ2020NJM-G  | VS-SCZ8010KI  | VS-SCZ2010YIE   | VS-SCZ8003K   |   |   |
| <b>Image Sensor</b>                 | 1/2.8" 2MP CMOS <b>STARVIS</b>   | 1/1.7" 2MP CMOS   | 1/2.8" 8MP CMOS <b>STARVIS</b>  | 1/2.8" 2MP CMOS <b>STARVIS 2</b>  | 1/2.8" 2MP CMOS <b>STARVIS 2</b>  | 1/2.3" 12MP CMOS  |
| <b>Focal Length</b>                 | 4.7 - 141mm, 30x Optical   | 6.5 - 130mm, 20x Optical  | 4.8 - 48mm, 10x Optical   | 4.8 - 48mm, 10x Optical   | 3.85 - 13.4mm, 3.5x Optical   |   |
| <b>Max. Aperture</b>                | F1.5 - F4.0  | F1.5 - F4.0   | F1.7 - F3.2   | F1.7 - F3.2   | F2.4- F5.0  |   |
| <b>Angle of View</b>                | HFOV: 61.2° - 2.2°<br>VFoV: 36.8° - 1.2°                                       | HFOV: 61.1° - 3.4°<br>VFoV: 36.7° - 1.9°  | HFOV: 60.2° - 6.6°<br>VFoV: 36.1° - 3.7°  | HFOV: 60.2° - 6.6°<br>VFoV: 36.1° - 3.7°  | HFOV: 77.6° - 25.9°(12MP)<br>HFOV: 75.4° - 24.9°(4K)                                |   |
| <b>Min. Illumination</b>            | Color: 0.005Lux/F1.5   | Color: 0.001Lux/F1.5  | Color: 0.1Lux/F1.7  | Color: 0.001Lux/F1.7  | Color: 0.5Lux/F2.4  |   |
| <b>Max. Resolution / Frame Rate</b> | Network: 1920x1080 (1080P)@25/30fps<br>LVDS: 1920x1080 (1080P)@25/30fps        | Network: 1920x1080 (1080P)@50/60fps   | Network: 3840x2160 (4K)@25/30fps  | Network: 1920x1080 (1080P)@50/60fps   | Network: 3840x2160 (4K)@25/30fps<br>4000x3000 (12MP) / 10fps                        |   |
| <b>Image Stabilization</b>          | EIS  | EIS   | EIS   | EIS   | EIS   |   |
| <b>Defog</b>                        | Digital  | Digital   | Digital   | Digital   | Digital   |   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking      |   |
| <b>Video Output</b>                 | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS  | 10/100M Ethernet  | 10/100M Ethernet  | 10/100M Ethernet  | 10/100M Ethernet  |
| <b>Thermal Image Input</b>          | -  | USB   | BT601/USB   | BT601/USB   | BT601/USB   | BT601/USB   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB  | Expanding Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 256G   |   |
| <b>Power</b>                        | 9V - 12VDC: Typical 2.5W, Max 4.5W   | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 3.7W, Max 5.6W  | 9V - 12VDC: Typical 3.7W, Max 5.6W  | 9V - 12VDC: Typical 3.5W, Max 4.5W  |   |
| <b>Dimensions(LxWxH)</b>            | 96.3 x 52 x 58.6mm   | 97 x 52 x 60mm  | 65 x 45 x 52mm  | 65 x 45 x 52mm  | 55 x 30 x 40mm  |   |
| <b>Weight</b>                       | 300g   | 325g  | 152g  | 152g  | 55g   |   |
| <b>DORI Distance(M)*</b>            | 2069 / 821 / 414 / 207   | 1300 / 516 / 260 / 130  | 1324 / 525 / 265 / 132  | 662 / 263 / 132 / 66  | 346 / 137 / 69/35   |   |
| <b>Special Features</b>             | NDAA   | Global Shutter  | 4K, NDAA  | AI-ISP, ColorView   | 4K, NDAA, Zero Distortion   |   |

## UAZ Series



VS-UAZ8020KI



VS-UAZ2030NA



VS-UAZ8010KI



VS-UAZ8003K

|                                     |  |   |  |  |
|-------------------------------------|--|---|--|--|
| <b>Image Sensor</b>                 | 1/1.8" 8MP CMOS<br><b>STARVIS 2</b>  | 1/2.8" 2MP CMOS<br><b>STARVIS</b>                                       | 1/2.8" 8MP CMOS<br><b>STARVIS</b>  | 1/2.3" 12MP CMOS   |
| <b>Focal Length</b>                 | 6.5 - 130mm, 20x Optical   | 4.7 - 141mm, 30x Optical  | 4.8 - 48mm, 10x Optical  | 3.85 - 13.4mm, 3.5x Optical                                  |
| <b>Max. Aperture</b>                | F1.5 - F4.0  | F1.5 - F4.0   | F1.7 - F3.2  | F2.4 - F5.0  |
| <b>Angle of View</b>                | HFoV: 61.1° - 3.4°<br>VFoV: 36.7° - 1.9°   | HFoV: 61.2° - 2.2°<br>VFoV: 36.8° - 1.2°                                | HFoV: 60.2° - 6.6°<br>VFoV: 36.1° - 3.7°   | HFoV: 77.6° - 25.9°(12MP)<br>VFoV: 75.4° - 24.9°(4K)         |
| <b>Min. Illumination</b>            | Color: 0.01Lux/F1.5  | Color: 0.005Lux/F1.5  | Color: 0.1Lux/F1.7   | Color: 0.5Lux/F2.4   |
| <b>Max. Resolution / Frame Rate</b> | Network: 3840x2160 (4K)@25/30fps   | Network: 1920x1080 (1080P)@50/60fps<br>LVDS: 1920x1080 (1080P)@25/30fps | Network: 3840x2160 (4K)@25/30fps   | Network: 3840x2160 (4K)@25/30fps<br>4000x3000 (12MP) / 10fps |
| <b>Image Stabilization</b>          | EIS  | EIS   | EIS  | EIS  |
| <b>Defog</b>                        | Digital  | Digital   | Digital  | Digital  |
| <b>Analytics</b>                    | Perimeter Intrusion Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Smart Tracking                         | Perimeter Intrusion Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection<br>Smart Tracking              |
| <b>Video Output</b>                 | 10/100M Ethernet   | 10/100M Ethernet, LVDS  | 10/100M Ethernet   | 10/100M Ethernet   |
| <b>Thermal Image Input</b>          | BT601/USB  | BT601/USB   | BT601/USB  | BT601/USB  |
| <b>Audio</b>                        | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out                                       |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)  | TTL x 2 (VISCA & Pelco)                                      |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 1TB                                      | Expanding Micro SD/SDHC/SDXC slot, up to 1TB   | Micro SD/SDHC/SDXC slot, up to 256G                          |
| <b>Power</b>                        | 9V - 12VDC: Typical 4.5W, Max 5.5W   | 9V - 12VDC: Typical 2.5W, Max 4.5W                                      | 9V - 12VDC: Typical 3.7W, Max 5.6W   | 9V - 12VDC: Typical 3.5W, Max 4.5W                           |
| <b>Dimensions(LxWxH)</b>            | 97.2 x 52.2 x 60.3mm   | 95 x 48.3 x 54.15mm   | 65 x 45 x 52mm   | 55 x 30 x 40mm   |
| <b>Weight</b>                       | 330g   | 154g  | 152g   | 55g  |
| <b>DORI Distance(M)*</b>            | 2600 / 1032 / 520 / 260  | 1945 / 722 / 389 / 194  | 1324 / 525 / 265 / 132   | 346 / 137 / 69 / 35  |
| <b>Special Features</b>             | 4K, NDAA   | /   | 4K, NDAA   | 4K, NDAA, Zero Distortion                                    |

\*The DORI standard (based on the IEC EN62676-4:2015 international standard) defines different levels of detail for detection (25PPM), observation (62PPM), recognition (125PPM), and Identification (250PPM). This table is for reference only and performance may vary depending on the environment.

# Thermal Module

Unleash the Power of Thermal Imaging with Our Comprehensive Module

VISHEEN's thermal module series offers a wide range of uncooled Long-Wave Infrared (LWIR) and cooled Mid-Wave Infrared (MWIR) imaging solutions. Designed to meet the most demanding applications, our modules deliver exceptional performance, reliability, and versatility.



## Industry-leading zoom capabilities:

Our modules feature the longest zoom ranges in the industry, with up to 350mm for LWIR and 900mm for MWIR, enabling you to capture distant targets with unparalleled clarity and detail.



## Thermal Module



## Robust performance:

Our modules are designed to operate in harsh environments and withstand extreme temperatures.



## Customizable configurations:

Choose from a variety of focal lengths, resolutions, and interfaces to meet your specific application requirements.

## Highly integrated design:

Ideal and easier for integration into any security camera system.

## Uncooled LWIR



VS-SCMA3507NR2-D



VS-SCMA2259NR2-D



VS-SCMA1505NR2-D



VS-SCM62259NRS-D



VS-SCM61505NRS-D

| Image Sensor                 | Uncooled VOx Microbolometer, 1280x1024                                 | Uncooled VOx Microbolometer, 1280x1024                                 | Uncooled VOx Microbolometer, 1280x1024                                 | Uncooled VOx Microbolometer, 640x512  | Uncooled VOx Microbolometer, 640x512  |
|------------------------------|--|--|--|---|---|
| Pixel Pitch                  | 12µm   | 12µm   | 12µm   | 12µm  | 12µm  |
| Spectral Band                | 8 - 14µm   | 8 - 14µm   | 8 - 14µm   | 8 - 14µm  | 8 - 14µm  |
| Sensitivity                  | NETD≤50mK  | NETD≤50mK  | NETD≤50mK  | NETD≤50mK   | NETD≤50mK   |
| Lens                         | 50 - 350mm, 7x Continuous zoom, F1.4                                   | 25 - 225mm, 9x Continuous zoom, F1.0-F1.5                              | 30 - 150mm, 5x Continuous zoom, F1.0-F1.2                              | 25 - 225mm, 9x Continuous zoom, F1.0-F1.5   | 30 - 150mm, 5x Continuous zoom, F0.9-F1.2   |
| Angle of View                | HFOV: 17.46° - 2.51°<br>VFOV: 14.01° - 2.01°                           | HFOV: 34.15° - 3.91°<br>VFOV: 27.61° - 3.13°                           | HFOV: 28.72° - 5.86°<br>VFOV: 23.15° - 4.69°                           | HFOV: 17.46° - 1.96°<br>VFOV: 14.01° - 1.56°  | HFOV: 14.59° - 2.51°<br>VFOV: 11.69° - 2.01°  |
| Max. Resolution / Frame Rate | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps<br>CVBS: 720x576/720x480 (D1)@25/30fps | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps<br>CVBS: 720x576/720x480 (D1)@25/30fps |
| Digital Zoom                 | 4x   | 4x   | 4x   | 8x  | 8x  |
| Image Stabilization          | EIS  | EIS  | EIS  | -   | -   |
| Analytics                    | Perimeter Intrusion Detection  | Perimeter Intrusion Detection  | Perimeter Intrusion Detection  | Perimeter Intrusion Detection   | Perimeter Intrusion Detection   |
| Video Output                 | 10/100M Ethernet, USB, BT1120  | 10/100M Ethernet, USB, BT1120  | 10/100M Ethernet, USB, BT1120  | 10/100M Ethernet, USB, BT1120, CVBS   | 10/100M Ethernet, USB, BT1120, CVBS   |
| Audio                        | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| Alarm                        | 1 In / 1 Out  | 1 In / 1 Out  |
| Serial Communication         | TTL x 2 (VISCA & Pelco)  | RS485; Compatible with Pelco   | RS485; Compatible with Pelco   | RS485; Compatible with Pelco  | RS485; Compatible with Pelco  |
| Edge Storage                 | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  |
| Power                        | 9V - 12VDC: Typical 4.0W, Max 8.4W                                     | 9V - 12VDC: Typical 4.5W, Max 5.5W                                     | 9V - 12VDC: Typical 4.5W, Max 5.5W                                     | 9V - 12VDC: Typical 4.5W, Max 5.5W  | 9V - 12VDC: Typical 4.5W, Max 5.5W  |
| Dimensions(LxWxH)            | Ø300mm×430mm   | Ø190mm×320mm   | Ø187mm×282mm   | Ø190mm×325mm  | Ø190mm×265mm  |
| Weight                       | 17kg(Including bracket)  | 4.7kg  | 3.4kg  | 3.7Kg   | 3.4Kg   |
| DRI Distance(M)*             | Human: 14583 / 3646 / 1823<br>Vehicle: 44722 / 11181 / 5590            | Human: 9375 / 2344 / 1172<br>Vehicle: 28750 / 7188 / 3954              | Human: 6250 / 1563 / 781<br>Vehicle: 19167 / 4792 / 2396               | Human: 9375 / 2344 / 1172<br>Vehicle: 28750 / 7188 / 3954   | Human: 6250 / 1563 / 781<br>Vehicle: 19167 / 4792 / 2396  |
| Special Features             | HD Thermal detector, 350mm motorized zoom                              | HD Thermal detector, motorized zoom                                    | HD Thermal detector, motorized zoom                                    | VGA Thermal detector, motorized zoom  | VGA Thermal detector, motorized zoom  |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

## Uncooled LWIR



|                                     | <b>VS-SCM60753NRS-D</b>   | <b>VS-SCM6055NRS</b>  | <b>VS-SCM6035NRS</b>  | <b>VS-SCM6025NRS</b>  | <b>VS-SCM6019NRS</b>  |
|-------------------------------------|---|---|---|---|---|
| <b>Image Sensor</b>                 | Uncooled VOx Microbolometer, 640x512  |
| <b>Pixel Pitch</b>                  | 12µm  | 12µm  | 12µm  | 12µm  | 12µm  |
| <b>Spectral Band</b>                | 8 - 14µm  |
| <b>Sensitivity</b>                  | NETD≤50mK   | NETD≤50mK   | NETD≤50mK   | NETD≤50mK   | NETD≤50mK   |
| <b>Lens</b>                         | 25 - 75mm, 3x Continuous zoom, F1.0-F1.2  | Athermalized 55mm, F1.0   | Athermalized 35mm, F1.0   | Athermalized 25mm, F1.0   | Athermalized 19mm, F1.0   |
| <b>Angle of View</b>                | HFoV: 17.46° - 5.86°<br>VFoV: 14.1° - 4.69°   | 8.0° x 6.4°   | 12.5° x 10°   | 17.4° x 14°   | 22.9° x 18.4°   |
| <b>Max. Resolution / Frame Rate</b> | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps<br>CVBS: 720x576/720x480 (D1)@25/30fps |
| <b>Digital Zoom</b>                 | 8x  | 8x  | 8x  | 8x  | 8x  |
| <b>Image Stabilization</b>          | -   | -   | -   | -   | -   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection   |
| <b>Video Output</b>                 | 10/100M Ethernet, USB, BT1120, CVBS   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out  |
| <b>Alarm</b>                        | 1 In / 1 Out  |
| <b>Serial Communication</b>         | RS485; Compatible with Pelco  |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>                        | 9V - 12VDC: 4W  |
| <b>Dimensions(LxWxH)</b>            | Ø88mm×175mm   | Ø65mm×107mm   | 90×48×47mm  | 76×48×47mm  | 70×48×47mm  |
| <b>Weight</b>                       | 1.2Kg   | 215g  | 129g  | 66g   | 52g   |
| <b>DRI Distance(M)*</b>             | Human: 3125 / 781 / 391<br>Vehicle: 9583 / 2396 / 1198  | Human: 2292 / 573 / 286<br>Vehicle: 7028 / 1757 / 878   | Human: 1458 / 365 / 182<br>Vehicle: 4472 / 1118 / 559   | Human: 1042 / 260 / 130<br>Vehicle: 3194 / 799 / 399  | Human: 792 / 198 / 99<br>Vehicle: 2438 / 607 / 303  |
| <b>Special Features</b>             | VGA Thermal detector, motorized zoom  | VGA Thermal detector, althermalized lens  |

| Uncooled LWIR   |   | Cooled MWIR   |   |   |
|---|---|---|---|---|
|   |   |   |   |   |
|  | <b>VS-SCM6013NRS</b>  |                             | <b>VS-SCM6009NRS</b>  |   |
| <b>Image Sensor</b>   | Uncooled VOx Microbolometer, 640x512  | Uncooled VOx Microbolometer, 640x512  | Cooled HgCdTe, 640x512  |   |
| <b>Pixel Pitch</b>  | 12µm  | 12µm  | 15µm  |   |
| <b>Spectral Band</b>  | 8 - 14µm  | 8 - 14µm  | 3.7 - 4.8µm   |   |
| <b>Sensitivity</b>  | NETD≤50mK   | NETD≤50mK   | NETD≤25mK   |   |
| <b>Lens</b>   | Athermalized 13mm, F1.0   | Athermalized 9.1mm, F1.0  | 90 - 900mm, 10x Continuous zoom, F4.0   |   |
| <b>Angle of View</b>  | 32.9° x 26.6°   | 48.6° x 38.6°   | HFOV: 6.11° - 0.61°<br>VFOV: 4.89° - 0.49°  |   |
| <b>Max. Resolution / Frame Rate</b>   | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps<br>CVBS: 720x576/720x480 (D1)@25/30fps | Network/USB: 1280x1024 (SXGA)@25fps<br>BT1120: 1920x1080 (1080P)@25fps<br>CVBS: 720x576/720x480 (D1)@25/30fps | Network: 1280x1024 (SXGA)@50/60fps  | Network: 1280x1024 (SXGA)@50/60fps  |
| <b>Digital Zoom</b>   | 8x  | 8x  | 8x  | 8x  |
| <b>Image Stabilization</b>  | -   | -   | EIS   | EIS   |
| <b>Analytics</b>  | Perimeter Intrusion Detection   | Perimeter Intrusion Detection   | Perimeter Intrusion Detection   | Perimeter Intrusion Detection   |
| <b>Video Output</b>   | 10/100M Ethernet, USB, BT1120, CVBS   | 10/100M Ethernet, USB, BT1120, CVBS   | 10/100M Ethernet  | 10/100M Ethernet  |
| <b>Audio</b>  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  | 1 Line In / 1 Line Out  |
| <b>Alarm</b>  | 1 In / 1 Out  | 1 In / 1 Out  | -   | -   |
| <b>Serial Communication</b>   | RS485; Compatible with Pelco  | RS485; Compatible with Pelco  | TTL x 2 (VISCA & Pelco)   | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>   | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  | Micro SD/SDHC/SDXC slot, up to 1TB  |
| <b>Power</b>  | 9V - 12VDC: 4W  | 9V - 12VDC: 4W  | Refrigeration pump: 24VDC±10%<br>Camera: 9V - 12VDC<br>Typical 20W, Max 65W(Refrigeration pump cooling) | Refrigeration pump: 24VDC±10%<br>Camera: 9V - 12VDC<br>Typical 20W, Max 65W(Refrigeration pump cooling) |
| <b>Dimensions(LxWxH)</b>  | 63x48x47mm  | 65x48x47mm  | 635 x 280 x 290mm   | 355 x 190 x 190mm   |
| <b>Weight</b>   | 35g   | 35g   | 25kg  | 8.5kg   |
| <b>DRI Distance(M)*</b>   | Human: 542 / 135 / 68<br>Vehicle: 1661 / 415 / 208  | Human: 379 / 95 / 47<br>Vehicle: 2528 / 632 / 316   | Human: 30000 / 7500 / 3750<br>Vehicle: 92000 / 23000 / 11500  | Human: 10000 / 2500 / 1250<br>Vehicle: 30667 / 7667 / 3833  |
| <b>Special Features</b>   | VGA Thermal detector, althermalized lens  | VGA Thermal detector, althermalized lens  | Cooling time: ≤7min @25°C<br>Refrigeration pump life: 20000 hours                                       | Cooling time: ≤7min @25°C<br>Refrigeration pump life: 20000 hours                                       |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

## EO/IR



VS-SCZ5035YCE-RV6-55

VS-SCZ5035YCE-RV6-35

VS-SCZ5035YCE-RV6-25

|                                     | Thermal   | Visible  | Thermal   | Visible  | Thermal   | Visible  |
|-------------------------------------|---|--|---|--|---|--|
| <b>Image Sensor</b>                 | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                      | 1/2.8" 5MP CMOS <b>STARVIS 2</b>   | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                      | 1/2.8" 5MP CMOS <b>STARVIS 2</b>   | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                      | 1/2.8" 5MP CMOS <b>STARVIS 2</b>   |
| <b>Lens</b>                         | 55mm, F1.0, 4x Digital Zoom   | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4  | 35mm, F1.0, 4x Digital Zoom   | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4  | 25mm, F1.0, 4x Digital Zoom   | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4  |
| <b>Angle of View</b>                | 8°×6.4°   | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°   | 12.5°×10°   | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°   | 17°×14°   | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°   |
| <b>Min. Illumination</b>            | -   | Color: 0.001Lux/F1.6   | -   | Color: 0.001Lux/F1.6   | -   | Color: 0.001Lux/F1.6   |
| <b>Max. Resolution / Frame Rate</b> | Network: 1280x1024 (SXGA)@25fps   | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps"   | Network: 1280x1024 (SXGA)@25fps   | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps  | Network: 1280x1024 (SXGA)@25fps   | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps  |
| <b>Image Stabilization</b>          | EIS   | EIS  | EIS   | EIS  | EIS   | EIS  |
| <b>Analytics</b>                    | Perimeter Intrusion Detection   | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and<br>Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection   | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and<br>Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection   | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and<br>Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>                 | BT601(Connecting to visible<br>camera)  | 10/100M Ethernet   | BT601(Connecting to visible<br>camera)  | 10/100M Ethernet   | BT601(Connecting to visible<br>camera)  | 10/100M Ethernet   |
| <b>Audio</b>                        | -   | 1 Line In / 1 Line Out   | -   | 1 Line In / 1 Line Out   | -   | 1 Line In / 1 Line Out   |
| <b>Serial Communication</b>         | -   | TTL x 2 (VISCA & Pelco)  | -   | TTL x 2 (VISCA & Pelco)  | -   | TTL x 2 (VISCA & Pelco)  |
| <b>Edge Storage</b>                 | -   | Built-in EMMC 50GB   | -   | Built-in EMMC 50GB   | -   | Built-in EMMC 50GB   |
| <b>Power</b>                        | 9V - 12VDC: Typical 3.9W, Max 5.5W  |  | 9V - 12VDC: Typical 3.9W, Max 5.5W  |  | 9V - 12VDC: Typical 3.9W, Max 5.5W  |  |
| <b>Dimensions(LxWxH)</b>            | Ø65mm x 78.5mm  | 96.3 x 52 x 58.6mm   | Ø47mm x 61mm  | 96.3 x 52 x 58.6mm   | Ø37mm x 47mm  | 96.3 x 52 x 58.6mm   |
| <b>Weight</b>                       | 210g  | 300g   | 127g  | 300g   | 64g   | 300g   |
| <b>DRI/DORI Distance(M)*</b>        | Human: 2292 / 573 / 286<br>Vehicle: 7028 / 1757 / 878   | 3360 / 1333 / 672 / 336  | Human: 1458 / 365 / 182<br>Vehicle: 4472 / 1118 / 559   | 3360 / 1333 / 672 / 336  | Human: 1042 / 260 / 130<br>Vehicle: 3194 / 799 / 399  | 3360 / 1333 / 672 / 336  |
| <b>Special Features</b>             | Temperature measurement<br>model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to+150°C , +100°C to<br>+550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models<br>support BT601 are optional   | Temperature measurement<br>model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to+150°C , +100°C to<br>+550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models<br>support BT601 are optional   | Temperature measurement<br>model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to+150°C , +100°C to<br>+550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models<br>support BT601 are optional   |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camera

Accessory

## EO/IR



VS-SCZ5035YCE-RV6-19



VS-SCZ5035YCE-RV6-13



VS-SCZ5035YCE-RV6-9

|                                     | Thermal  | Visible   | Thermal  | Visible   | Thermal  | Visible   |
|-------------------------------------|--|---|--|---|--|---|
| <b>Image Sensor</b>                 | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                 | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                 | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  | Uncooled VOx Microbolometer<br>640x512, Pixel Pitch: 12µm<br>8 - 14µm, NETD≤50mK                                 | 1/2.8" 5MP CMOS <b>STARVIS 2</b>  |
| <b>Lens</b>                         | 19mm, F1.0, 4x Digital Zoom  | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4   | 13mm, F1.2, 4x Digital Zoom  | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4   | 9.1mm, F1.0, 4x Digital Zoom   | 4.8 - 168mm, 35x Optical<br>F1.6 - F4.4   |
| <b>Angle of View</b>                | 22°×18°  | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°  | 33°×26°  | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°  | 48°×38°  | HFOV: 56.1° - 1.75°<br>VFOV: 43.6° - 1.31°  |
| <b>Min. Illumination</b>            | -  | Color: 0.001Lux/F1.6  | -  | Color: 0.001Lux/F1.6  | -  | Color: 0.001Lux/F1.6  |
| <b>Max. Resolution / Frame Rate</b> | Network: 1280x1024 (SXGA)@25fps  | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps   | Network: 1280x1024 (SXGA)@25fps  | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps   | Network: 1280x1024 (SXGA)@25fps  | Network: 2560x1920 (5MP)@50fps,<br>2560x1440 (4MP)@50/60fps   |
| <b>Image Stabilization</b>          | EIS  | EIS   | EIS  | EIS   | EIS  | EIS   |
| <b>Analytics</b>                    | Perimeter Intrusion Detection  | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection  | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection | Perimeter Intrusion Detection  | Perimeter Intrusion Detection<br>Abnormal Behavior Detection<br>Smart Tracking<br>Human & Vehicle Detection and Classification<br>Fire & Smoke Detection<br>Smoking & Calling Detection |
| <b>Video Output</b>                 | BT601(Connecting to visible camera)  | 10/100M Ethernet  | BT601(Connecting to visible camera)  | 10/100M Ethernet  | BT601(Connecting to visible camera)  | 10/100M Ethernet  |
| <b>Audio</b>                        | -  | 1 Line In / 1 Line Out  | -  | 1 Line In / 1 Line Out  | -  | 1 Line In / 1 Line Out  |
| <b>Serial Communication</b>         | -  | TTL x 2 (VISCA & Pelco)   | -  | TTL x 2 (VISCA & Pelco)   | -  | TTL x 2 (VISCA & Pelco)   |
| <b>Edge Storage</b>                 | -  | Built-in EMMC 50GB  | -  | Built-in EMMC 50GB  | -  | Built-in EMMC 50GB  |
| <b>Power</b>                        | 9V - 12VDC: Typical 3.9W, Max 5.5W   |   | 9V - 12VDC: Typical 3.9W, Max 5.5W   |   | 9V - 12VDC: Typical 3.9W, Max 5.5W   |   |
| <b>Dimensions(LxWxH)</b>            | Ø30 x 40.5mm   | 96.3 x 52 x 58.6mm  | 35.7 x 26 x 26mm   | 96.3 x 52 x 58.6mm  | 35.7 x 26 x 26mm   | 96.3 x 52 x 58.6mm  |
| <b>Weight</b>                       | 50g  | 300g  | 33g  | 300g  | 33g  | 300g  |
| <b>DRI/DORI Distance(M)*</b>        | Human: 792 / 198 / 99<br>Vehicle: 2438 / 607 / 303   | 3360 / 1333 / 672 / 336   | Human: 542 / 135 / 68<br>Vehicle: 1661 / 415 / 208   | 3360 / 1333 / 672 / 336   | Human: 379 / 95 / 47<br>Vehicle: 2528 / 632 / 316  | 3360 / 1333 / 672 / 336   |
| <b>Special Features</b>             | Temperature measurement model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to +150°C , +100°C to +550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models support BT601 are optional   | Temperature measurement model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to +150°C , +100°C to +550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models support BT601 are optional   | Temperature measurement model(RT6) optional<br>Accuracy: ±3°C , ±3%<br>Range: -20°C to +150°C , +100°C to +550°C | VS-SCZ8020KI/VS-SCZ8010KI/<br>VS-SCZ8003K and other models support BT601 are optional   |

\*The DRI distances are calculated according to Johnson criteria: detection(1.5 or more pixels), recognition(6 or more pixels), identification(12 or more pixels). This table is for reference only and performance may vary depending on the environment.

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

# SWIR Camera Module

Harness the power of SWIR (short-wave infrared) technology to transcend the limitations of traditional surveillance with SWIR series. Our cutting-edge SWIR cameras provide unparalleled visibility through challenging conditions, such as fog, haze, and smoke, enabling you to safeguard your world with unprecedented clarity and insight.



## SWIR: Seeing Beyond the Visible

### Penetrate Obscurity

See through fog, haze, and smoke with exceptional clarity.

### Detect Hidden Objects

Reveal objects obscured by vegetation or other materials.

### Discern Material Composition

Identify objects based on their unique spectral signatures.

## Elevate Your Surveillance Capabilities

### Enhanced Perimeter Security

Protect vast areas even in adverse weather conditions.

### Critical Infrastructure Monitoring

Safeguard sensitive assets from hidden threats.

### Forensic Investigations

Uncover crucial evidence in challenging environments.

## SWIR Camera Module



VS-MIZA030NIB



VS-MIZ6030NIB



VS-MIYA012N



VS-MIY6025N

|                                     |  |  |  |  |
|-------------------------------------|--|--|--|--|
| <b>Sensor Type</b>                  | 1/2" InGaAs, 1280x1024<br><small>SenSWIR</small>                       | 1/4" InGaAs, 640x512<br><small>SenSWIR</small>                         | 1/2" InGaAs, 1280x1024<br><small>SenSWIR</small>                       | 1/4" InGaAs, 640x512<br><small>SenSWIR</small>                         |
| <b>Pixel Pitch</b>                  | 5µm  | 5µm  | 5µm  | 5µm  |
| <b>Spectral Band</b>                | 400 - 1700nm   | 400 - 1700nm   | 400 - 1700nm   | 400 - 1700nm   |
| <b>Focal Length</b>                 | 17 - 510mm, 30x Optical  | 17 - 510mm, 30x Optical  | 12mm   | 25mm   |
| <b>Max. Aperture</b>                | F2.9 - F6.6  | F2.9 - F6.6  | F1.4   | F1.3   |
| <b>Angle of View</b>                | HFoV: 21.32° - 0.72°<br>VFoV: 17.13° - 0.58°                           | HFoV: 10.75° - 0.36°<br>VFoV: 8.61° - 0.29°                            | 29.86°×24.09°  | 7.32°×5.86°  |
| <b>Max. Resolution / Frame Rate</b> | Network: 1280x1024 (SXGA)@50/60fps<br>LVDS: 1920x1080 (1080P)@50/60fps |
| <b>Image Stabilization</b>          | EIS  | EIS  | EIS  | EIS  |
| <b>Analytics</b>                    | Perimeter Intrusion Detection  | Perimeter Intrusion Detection  | Perimeter Intrusion Detection  | Perimeter Intrusion Detection  |
| <b>Video Output</b>                 | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   | 10/100M Ethernet, LVDS   |
| <b>Audio</b>                        | 1 Line In / 1 Line Out   | 1 Line In / 1 Line Out   | -  | -  |
| <b>Serial Communication</b>         | TTL x 2 (VISCA & Pelco)  |
| <b>Edge Storage</b>                 | Micro SD/SDHC/SDXC slot, up to 1TB                                     |
| <b>Power</b>                        | 9V - 12VDC: Typical 4W, Max 9W   | 9V - 12VDC: Typical 4W, Max 9W   | 9V - 12VDC: Max 4.5W   | 9V - 12VDC: Max 4.5W   |
| <b>Dimensions(LxWxH)</b>            | 320 x 109 x 109mm  | 320 x 109 x 109mm  | "121.6 x 50 x 55mm<br>48 x 50 x 55mm(Without lens)"                    | "113.1 x 50 x 55mm<br>48 x 50 x 55mm(Without lens)"                    |
| <b>Weight</b>                       | 3.2kg  | 3.2kg  | 400g   | 420g   |
| <b>DORI Distance(M)</b>             | 4080 / 1619 / 816 / 408  | 4080 / 1619 / 816 / 408  | 96 / 38 / 19 / 10  | 200 / 79 / 40 / 20   |

Zoom Camera Module

Thermal Module

SWIR Camera Module

Drone Gimbal Camer

Accessory

# Drone Gimbal Camera

Soar to new heights of aerial surveillance with UAV series, specifically designed to meet the demanding needs of drone applications. Our comprehensive range of camera modules and gimbal camera systems provide a multitude of optical combinations, including visible light, thermal imaging, and laser ranging, all packaged in a lightweight and highly integrated solution.



## Tailored for Drone Applications:

Experience seamless integration with various drone platforms.

## Multi-Sensor Fusion

Gain comprehensive situational awareness with visible, thermal, and laser data.

## Lightweight and Compact Design

Minimize drone payload and maximize flight time.

01

Unparalleled Versatility for Aerial Intelligence

02

01

Capture Every Detail from the Sky

## High-Resolution Imaging

Capture stunning visuals with exceptional clarity.

02

## Advanced Thermal Imaging

Detect and track objects even in low-light or obscured conditions.

03

## Precise Laser Ranging

Accurately measure distances and create 3D models.

03

| Visible                             |  |   |                |   |                |
|-------------------------------------|--|---|----------------|---|----------------|
|                                     | VS-UAP8003K  | VS-UAP8010K                                   | VS-UAP2030     |   |                |
| <b>Image Sensor</b>                 | 1/2.3" 12MP CMOS                                     | 1/2.8" 8MP CMOS                               | <b>STARVIS</b> | 1/2.8" 2MP CMOS                               | <b>STARVIS</b> |
| <b>Focal Length</b>                 | 3.85 - 13.4mm  | 4.8 - 48mm                                    |                | 4.7 - 141mm                                   |                |
| <b>Optical Zoom</b>                 | 3.5x   | 10x   |                | 30x   |                |
| <b>Max. Aperture</b>                | F2.4- F5.0   | F1.7 - F3.2                                   |                | F1.5 - F4.0                                   |                |
| <b>Min. Illumination</b>            | Color: 0.5Lux/F2.4                                   | Color: 0.01Lux/F1.7, B&W: 0.001Lux/F1.7       |                | Color:0.001Lux/F1.5, B&W: 0.0001Lux/F1.5      |                |
| <b>Angle of View</b>                | HFoV: 77.6° - 25.9°(12MP)<br>HFoV: 75.4° - 24.9°(4K) | HFoV: 60.2° - 6.6°<br>VFoV: 36.1° - 3.7°      |                | HFoV: 61.2° - 2.2°<br>VFoV: 36.8° - 1.2°      |                |
| <b>Max. Resolution / Frame Rate</b> | 3840x2160 (4K)@25/30fps<br>4000x3000 (12MP)@10fps    | 3840x2160 (4K)@25/30fps                       |                | 1920x1080 (1080P)@50/60fps                    |                |
| <b>IVS</b>                          | -  | -   |                | Human & Vehicle                               |                |
| <b>Trace</b>                        | support  | support                                       |                | support                                       |                |
| <b>Control Protocol</b>             | UDP  | UDP   |                | UDP   |                |
| <b>Angular Jitter</b>               | ±0.01°   | ±0.01°  |                | ±0.01°  |                |
| <b>Controlled Rotation Range</b>    | Pitch: +70° to -100°, Heading: 360° continuous       | Pitch: +70° to -90°, Heading: 360° continuous |                | Pitch: +70° to -90°, Heading: 360° continuous |                |
| <b>Max. Control Speed</b>           | Pitch: 120°/s, Heading: 180°/s                       | Pitch: 120°/s, Heading: 180°/s                |                | Pitch: 120°/s, Heading: 180°/s                |                |
| <b>Laser Range Finder</b>           | -  | 1200m   |                | -   |                |
| <b>Communication Interface</b>      | WAN, CAN   | WAN, CAN                                      |                | Sbus, WAN, serial port, CAN                   |                |
| <b>Interface Type</b>               | Quick disassembly interface                          | Quick disassembly interface                   |                | Quick disassembly interface                   |                |
| <b>Storage</b>                      | Micro SD/SDHC/SDXC slot, up to 1TB                   | Micro SD/SDHC/SDXC slot, up to 1TB            |                | Micro SD/SDHC/SDXC slot, up to 1TB            |                |
| <b>Operational Temperature</b>      | -10°C to +60°C                                       | -20°C to +60°C                                |                | -10°C to +60°C                                |                |
| <b>Input Voltage</b>                | 12V - 25V DC   | 12V - 25V DC                                  |                | 14V - 60V DC                                  |                |
| <b>Dimensions(LxWxH)</b>            | 78.3 x 98.1 x 113.2mm                                | 92 x 110.19 x 151.1mm                         |                | 121 x 104 x 180mm                             |                |
| <b>Weight</b>                       | 385g   | 470g  |                | 550g  |                |

## EO/IR



VS-UAP8003K-RV3/RT3-19



VS-UAP2030NA-RV3/RT3-19



VS-UAP2030NA-RV6-25



VS-UAP2030-GV6025



VS-UAP2030-GV6019-L15



VS-UAP2010-GV6019-L15-P

|                                     | Zoom Camera Module  | Thermal Module  | SWIR Camera Module   | Drone Gimbal Camera  | Accessory  |  |
|-------------------------------------|---|---|--|--|--|--|
| <b>Visible Sensor</b>               | 1/2.3" 12MP CMOS  | 1/2.8" 2MP CMOS <b>STARVIS</b>                                    | 1/2.8" 2MP CMOS <b>STARVIS</b>   | 1/2.8" 2MP CMOS <b>STARVIS</b>   | 1/2.8" 2MP CMOS <b>STARVIS</b>   | 1/2.8" 2MP CMOS <b>STARVIS</b>   |
| <b>Visible Lens</b>                 | 3.85 - 13.4mm, 3.5x<br>F2.4 - F5.0<br>HFoV: 75.4° - 24.9°         | 4.7 - 141mm, 30x<br>F1.5 - F4.0<br>HFoV: 61.2° - 2.2              | 4.7 - 141mm, 30x<br>F1.5 - F4.0<br>HFoV: 61.2° - 2.2                     | 4.7 - 141mm, 30x<br>F1.5 - F4.0<br>HFoV: 61.2° - 2.2                     | 4.7 - 141mm, 30x<br>F1.5 - F4.0<br>HFoV: 61.2° - 2.2                     | 4.7 - 47mm, 10x<br>F1.6 - F3.0<br>HFoV: 69.9° - 8.7°                     |
| <b>Thermal Detector</b>             | 12µm 384x288 VOx  | 12µm 384x288 VOx  | 12µm 640x512 Vox   | 12µm 640x512 Vox   | 12µm 640x512 Vox   | 12µm 640x512 VOx   |
| <b>Thermal Lens</b>                 | 19mm<br>FoV: 13.83° x 10.39°                                      | 19mm<br>FoV: 13.83° x 10.39°                                      | 25mm<br>FoV: 17.46° x 14.01°   | 25mm<br>FoV: 17.46° x 14.01°   | 19mm<br>FoV: 22.85° x 18.37°   | "19mm<br>FoV: 22.85° x 18.37°"   |
| <b>Max. Resolution / Frame Rate</b> | Visible: 3840x2160 (4K)@25/30fps<br>Thermal: 704x576(D1)@25/30fps | Visible: 3840x2160 (4K)@25/30fps<br>Thermal: 704x576(D1)@25/30fps | Visible: 1920x1080 (1080P)@25/30fps<br>Thermal: 1280x1024(SXGA)@25/30fps |
| <b>Thermometry</b>                  | optional(-RT3 model)  | optional(-RT3 model)  | -  | -  | -  | -  |
| <b>IVS</b>                          | -   | -   | -  | Human & Vehicle  | Human & Vehicle  | Human & Vehicle  |
| <b>Angular litter</b>               | ±0.01°  | ±0.01°  | ±0.01°   | ±0.01°   | ±0.01°   | ±0.01°   |
| <b>Controlled Rotation Range</b>    | Pitch: +70° to -90°, Heading: 360° continuous                     | Pitch: +70° to -90°, Heading: 360° continuous                     | Pitch: +70° to -90°, Heading: 360° continuous                            | Pitch: +90° to -45°, Heading: 360° continuous                            | Pitch: +90° to -45°, Heading: 360° continuous                            | Pitch: +90° to -45°, Heading: 360° continuous                            |
| <b>Max. Control Speed</b>           | Pitch: 120°/s, Heading: 180°/s                                    | Pitch: 120°/s, Heading: 180°/s                                    | Pitch: 120°/s, Heading: 180°/s   | Pitch: 120°/s, Heading: 180°/s   | Pitch: 120°/s, Heading: 180°/s   | Pitch: 120°/s, Heading: 180°/s   |
| <b>Laser Range Finder</b>           | -   | -   | -  | -  | 1500m  | 1500m  |
| <b>Laser Indication</b>             | -   | -   | -  | -  | -  | 1000m  |
| <b>Communication Interface</b>      | LAN, CAN  | LAN, CAN  | LAN, CAN   | Sbus, LAN, serial port, CAN  | Sbus, LAN, serial port, CAN  | Sbus, LAN, serial port, CAN  |
| <b>Interface Type</b>               | Quick disassembly interface                                       | Quick disassembly interface                                       | Quick disassembly interface  | Quick disassembly interface  | Quick disassembly interface  | Quick disassembly interface  |
| <b>Storage</b>                      | Micro SD/SDHC/SDXC slot, up to 1TB                                | Micro SD/SDHC/SDXC slot, up to 1TB                                | Micro SD/SDHC/SDXC slot, up to 1TB                                       | Micro SD/SDHC/SDXC slot, up to 1TB                                       | Micro SD/SDHC/SDXC slot, up to 1TB                                       | Micro SD/SDHC/SDXC slot, up to 1TB                                       |
| <b>Operational Temperature</b>      | -10°C to +55°C  | -20°C to +60°C  | -20°C to +60°C   | -20°C to +45°C   | -20°C to +45°C   | -20°C to +60°C   |
| <b>Input Voltage</b>                | 12V - 25V DC  | 12V - 25V DC  | 12V - 25V DC   | 15V - 60V DC   | 15V - 60V DC   | 15V - 60V DC   |
| <b>Dimensions(LxWxH)</b>            | 77.2 x 120.65 x 162.07mm  | 109.8 x 136.18 x 164.46mm   | 139.8 x 159.27 x 188.47mm  | 128 x 122 x 198mm  | 128 x 122 x 198mm  | 125 x 120 x 157mm  |
| <b>Weight</b>                       | 457g  | 860g  | 860g   | 780g   | 780g   | 640g   |

## Laser IR Illuminator

|                                    | VS-LD1005      | VS-LD1008      | IR-808-1500-S   | IR-940-1500-S   | IR-808-2000-S   | IR-940-2000-S   | IR-808-3000-M  | IR-808-5000-M  |
|------------------------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|--|--|
| <b>Effective Range Illuminator</b> | ≥500m          | ≥800m          | ≥1500m          | ≥1500m          | ≥2000m          | ≥2000m          | ≥3000m   | ≥5000m   |
| <b>Wavelength</b>                  | 850nm          | 850nm          | 808nm           | 940nm           | 808nm           | 940nm           | 808nm  | 808nm  |
| <b>Max. Output Power</b>           | 2W             | 4W             | 8W              | 9.5W            | 12W             | 12W             | 20W  | 50W  |
| <b>Illuminator Angle</b>           | 2° - 52°       | 2° - 60°       | 0.8° - 70°      | 0.8° - 70°      | 0.8° - 70°      | 0.8° - 70°      | 0.3° - 35°   | 0.3° - 30°   |
| <b>Power</b>                       | 12VDC, Max 15W | 12VDC, Max 20W | 12VDC, Max 28W  | 24VDC, Max 28W  | 24VDC, Max 40W  | 24VDC, Max 40W  | 24VDC, Max 75W   | 24VDC, Max 130W  |
| <b>Serial Communication</b>        | RS485/TTL      | RS485/TTL      | RS485/TTL       | RS485/TTL       | RS485/TTL       | RS485/TTL       | RS485/TTL  | RS485/TTL  |
| <b>Laser Class</b>                 | 3B             | 3B             | 4B              | 4B              | 4B              | 4B              | 4B   | 4B   |
| <b>Dimensions(LxWxH)</b>           | 60 x 30 x 40mm | 90 x 40 x 55mm | 147 x 64 x 63mm | 310 x 98 x 78mm  | 372 x 153 x 132mm  |
| <b>Weight</b>                      | 77g            | 210g           | 550g            | 550g            | 550g            | 550g            | 1.7kg  | 2.3kg  |
| <b>Special Features</b>            | /              | /              | /               | /               | /               | /               | Motorized alignment adjustment: ±3°, Accuracy: 0.01° - 0.02° | Motorized alignment adjustment: ±3°, Accuracy: 0.01° - 0.02° |

## Laser Range Finder

|                          | LR3000  | LR4000  | LR6000  | LR12000   |
|--------------------------|---|---|---|---|
| <b>Max Range</b>         | Building≥4000m<br>Vehicle≥3000m<br>Human≥2000m<br>UAV≥1000m | Building≥5600m<br>Vehicle≥4800m<br>Human≥3200m<br>UAV≥1700m | Building≥7100m<br>Vehicle≥6000m<br>Human≥3800m<br>UAV≥2000m | Building≥16000m<br>Vehicle≥12000m<br>Human≥5900m<br>UAV≥3200m |
| <b>Min Range</b>         | 20m   | 50m   | 20m   | 50m   |
| <b>Accuracy</b>          | ±1m   | ±1m   | ±1m   | ±2m   |
| <b>Frequency</b>         | 1 - 10Hz  | 1 - 10Hz  | 1 - 10Hz  | 1 - 10Hz  |
| <b>Range Resolution</b>  | ≤20m  | ≤30m  | ≤30m  | ≤30m  |
| <b>Eye safety</b>        | Class1/1M   | Class1/1M   | Class1/1M   | Class1/1M   |
| <b>Wavelength</b>        | 1535nm  | 1535nm  | 1535nm  | 1535nm  |
| <b>Power</b>             | 4.5 - 16VDC,<br>Standby 1mW, Typical ≤2.5W, Max≤ 7W@12V     | 4.5 - 16VDC,<br>Standby 1mW, Typical ≤4W, Max≤ 14W@12V      | 4.5 - 16VDC,<br>Standby 1mW, Typical ≤3.5W, Max≤ 7W@12V     | 4.5 - 16VDC,<br>Standby 1mW, Typical ≤3.5W, Max≤ 7W@12V       |
| <b>Dimensions(LxWxH)</b> | 48 x 30.5 x 21mm  | 65 x 48 x 32mm  | 65 x 48 x 32mm  | 83 x 46.5 x 59mm  |
| <b>Weight</b>            | 32g   | 75g   | 58g   | 127g  |

## Camera Expansion Board

| SDI & CVBS Board | RS485 & Alarm Board | 24V Power Board | PoE Power Board | LVDS/MIPI Cable |
|------------------|---------------------|-----------------|-----------------|-----------------|
|                  |                     |                 |                 |                 |

# VISHEEN

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