



# ZS-EL Series

## Ultra Distance Dual Spectrum PTZ Camera

It is equipped to the brushless DC serving motor, new generation AI behavior analysis algorithm, fire detection, optional wiper and infrared illumination, thermal image motorized lens up to 225mm for Ultra distance detection.



### Intelligent Fire Detection

Based on advanced intelligent algorithm to avoid fire incident in advance.



### Powerful Behavior Analysis Algorithms

New generation image algorithms inbuilt dual spectrum PTZ : Line crossing, intrusion, region entry & exit.



### Perfect Software Access Capacity

Support kinds of network protocols for easily access third party.



### Complete Customizability

Support laser range finder, laser illuminator, radar in options.



### Ultra Distance Detection

High thermal image resolution up to 640\*512, 12μm pixel pitch, and visible light up to 4MP, range of detection up to 9km for human via thermal image camera.



### High Accuracy PTZ Structure

Equipped absolute-position encoder, which can insure accurate presetting without self-inspection anytime as never before.

## Applications



Perimeter protection



Fire protection



Coastal defense



Border protection

# Specifications

| Thermal Module             |     | EL3                                                               | EL6                           |                              |
|----------------------------|-----|-------------------------------------------------------------------|-------------------------------|------------------------------|
| Detector                   |     | VOx Uncooled FPA                                                  |                               |                              |
| Resolution/<br>Pixel pitch |     | 384x288/12μm                                                      |                               | 640x512/12μm                 |
| NETD                       |     | ≤35mK@ 25°C                                                       |                               |                              |
| Spectral range             |     | 8-14μm                                                            |                               |                              |
| Focus Method               |     | Manual/Motorized(auto focus)                                      |                               |                              |
| Focal Length               |     | 30-150mm                                                          | 30-180mm                      | 25-225mm                     |
| FOV                        | EL3 | 8.75°x 6.57°to 1.76°x 1.32°                                       | 8.75°x 6.57°to 1.46°x 1.10°   | 10.47°x 7.87°to 1.18°x 0.88° |
|                            | EL6 | 14.59°x 11.69°to 2.93°x 2.35°                                     | 14.59°x 11.69°to 2.44°x 1.96° | 17.46°x 14°to 1.96°x 1.5°    |
| Image adjustment           |     | Auto/Manual adjustment for contrast ratio & brightness & acutance |                               |                              |
| Uniformity correction      |     | Auto/Manual shutter, background correction                        |                               |                              |

## Optical Module

|                   |                              |
|-------------------|------------------------------|
| Image Sensor      | 1/1.8" Progressive Scan CMOS |
| Resolution        | 2688×1520                    |
| Focal Length&Zoom | 10-550mm, 55x                |
| FOV               | 58.4°to 1.1°(wide to narrow) |

## Image Effect

|                       |                                                              |
|-----------------------|--------------------------------------------------------------|
| Thermal image process | AGC, IDE                                                     |
| Color Palette         | Optional 10 color palettes(rust, rainbow, white/black, etc.) |

## Smart Function

|                |                                                              |
|----------------|--------------------------------------------------------------|
| VCA            | motion detection, cross line, intrusion, area entry and exit |
| Fire Detection | Support                                                      |

## PTZ

|                      |                                          |
|----------------------|------------------------------------------|
| Movement range       | Pan:360° continuous; Tilt: -90°~+90°     |
| Presets              | 200                                      |
| Power Off Memory     | Support                                  |
| Pan speed            | 0.01°~60°/s                              |
| Tilt speed           | 0.01°~30°/s                              |
| Auto Horizontal Scan | Preset patrol / Auto line scanning & etc |

## Video and Audio

|                       |                                                 |                               |
|-----------------------|-------------------------------------------------|-------------------------------|
| Video Compression     | H.264 / H.265                                   |                               |
| Main-Stream (Visible) | 2688*1520,2560*1440,1920*1080,1280*960,1280*720 |                               |
| Sub-stream (Visible)  | 1280*720,640*480,352*288                        |                               |
| Main-Stream (Thermal) | 1920*1080, 1280*1024, 640*512                   | 1920*1080, 1280*1024, 640*512 |
| Sub-stream (Thermal)  | 640*512                                         | 640*512                       |
| Audio compression     | G.711                                           |                               |

## Network

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| Protocols              | IPv4/IPv6,HTTP,HTTPS,,FTP,DNS,NTP,RTSP,TCP,UDP,DHCP        |
| API                    | ISAPI,SDK, third-party management platform, ONVIF          |
| Common function        | Hearbet, password protection, multi-user access control    |
| Security               | Support password protection, bonding MAC ID, IP filtration |
| Simultaneous Live View | 10 channels                                                |
| User/Host level        | Up to 9 users, 3 levels: Administrator, Operator, General  |
| Web Browser            | Google Kernel Browser, Edge                                |

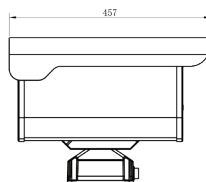
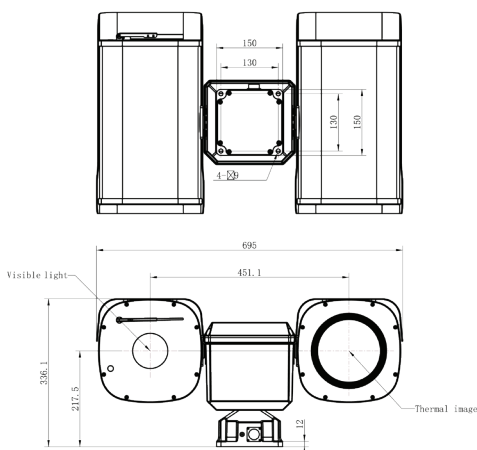
## Interface

|                         |                                        |
|-------------------------|----------------------------------------|
| Alarm                   | 1x ch input, 1x ch output              |
| Audio                   | 1x ch input, 1x ch output              |
| Serial port             | 1x ch RS485                            |
| Communication Interface | RJ45 10 M/100 M self-adaptive Ethernet |
| Storage                 | Embedded EMMC 16GB                     |

## General

|                               |                                                                                |
|-------------------------------|--------------------------------------------------------------------------------|
| Web Client Language           | English                                                                        |
| Laser ranging or illumination | Optional                                                                       |
| Power Supply                  | DC48V,6.7A                                                                     |
| Power Consumption             | <150W                                                                          |
| Work Temperature/ Humidity    | -20°C~+60°C(customized -40°C), <90%RH                                          |
| Storage temperature           | -45°C ~ +75°C                                                                  |
| Protection                    | IP66                                                                           |
| Reliability                   | TVS 6000V lightning protection, surge protection, voltage transient protection |
| Dimension                     | 695mm*457mm*336mm                                                              |
| Weight                        | <50Kg                                                                          |

# Dimension



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