

# EYE6N0-S678

## AI Video Smart City Camera

### Features

- 4K60 HDR/WDR AI camera accelerated by NVIDIA® Jetson Orin™ NX Super
- Up to 157 TOPS AI with multiple models including Generative AI
- Hardware ISP design without CPU/GPU Loading
- Lens support auto-focus and auto-IRIS
- DMA PCIe design high-bandwidth capture, providing RGB444 image quality



### Camera Specifications

| Sensor Specifications       |                                                                                                                      |                           |                           |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------|
| Max Resolution              | 3840x2160 (8M)                                                                                                       | Frame Rate                | 60                        |
| Shutter                     | Rolling Shutter                                                                                                      | Sensor Size               | 1/1.8"                    |
| Pixel Size                  | 2.0 x 2.0 μm                                                                                                         | Sensor Model              | CMOS                      |
| Color/Mono                  | Color                                                                                                                | Lens                      | Build in Focal lens       |
| Lens Specifications         |                                                                                                                      |                           |                           |
| Focal Length                | 10.2mm (W) ~ 29.5mm (T)                                                                                              | Aperture                  | F1.6 (W) ~ F1.7 (T)       |
| FOV(D)                      | 52~16.6 degree                                                                                                       | Mount                     | Build in                  |
| IRIS Control                | DC Auto IRIS                                                                                                         | IR Cut Filter             | Can be switched on or off |
| Video Tuning Specifications |                                                                                                                      |                           |                           |
| Shutter Speed               | 1/30(1/25) second – 1/76800 second                                                                                   | Auto Gain Control         | 60dB                      |
| HDR                         | Yes (2 Frames)                                                                                                       | WDR                       | Yes                       |
| 2D/3DNR                     | Yes                                                                                                                  | Low Light Gain Technology | Yes                       |
| Video Adjustment            | Brightness, contrast, hue, saturation, sharpness, horizontal flip, vertical flip, rotation, overexposure suppression | EV Value                  | EV - 2 ~ EV + 2           |

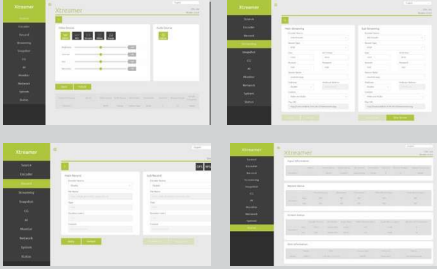
### System Specifications

| System            |                                                                                                    |                                                                                                   |
|-------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| CPU               | NVIDIA Jetson Orin™ NX 8GB Super<br>6-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU<br>1.5MB L2 + 4MB L3 | NVIDIA Jetson Orin™ NX 16GB Super<br>8-Core Arm® Cortex®-A78AE v8.2 64-Bit CPU<br>2MB L2 + 4MB L3 |
| GPU               | 1024-Core NVIDIA Ampere Architecture GPU with 32 Tensor Cores                                      |                                                                                                   |
| AI Performance    | NVIDIA Jetson Orin™ NX 8GB Super<br>117 TOPS                                                       | NVIDIA Jetson Orin™ NX 16GB Super<br>157 TOPS                                                     |
| System Memory     | NVIDIA Jetson Orin™ NX 8GB Super<br>8GB LPDDR5                                                     | NVIDIA Jetson Orin™ NX 16GB Super<br>16GB LPDDR5                                                  |
| Interface         |                                                                                                    |                                                                                                   |
| Storage           | Supports External NVMe                                                                             |                                                                                                   |
| Display Interface | 1xHDMI2.0                                                                                          |                                                                                                   |
| Ethernet          | 1xRJ45 for 10/100/1000Mbps Ethernet<br>DHCP Client                                                 |                                                                                                   |
| Wireless          | 4G/5G/Wi-Fi 6 ( Optional )                                                                         |                                                                                                   |
| USB               | 1xUSB3.2 Gen2 ( Type-C )                                                                           |                                                                                                   |

### Key Points

|                  |                            |
|------------------|----------------------------|
| Wireless Network |                            |
| Wi-Fi Support    | Wi-Fi 802.11 a/b/g/n/ac/ax |

## SDK / Software

| Video Feature                                                                        |                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Encode                                                                         | AV1 ( UHP )<br>1×4K60                                                                                                                                                                                                                                                      |
|                                                                                      | H.265 ( UHP )<br>1×4K60                                                                                                                                                                                                                                                    |
|                                                                                      | H.264 ( UHP )<br>1×4K60                                                                                                                                                                                                                                                    |
|                                                                                      |                                                                                                                                                                                                                                                                            |
| SDK                                                                                  |                                                                                                                                                                                                                                                                            |
| QCAP                                                                                 | Capture<br>High Performance Renderer<br>Image Snapshot                                                                                                                                                                                                                     |
|                                                                                      | Record<br>Encrypt / Sync / Clone / Recording<br>Time-Shifting / Rewind / Pre-Event / Recording<br>Animation Transition Effect<br>Video Cropping, Scaling and Alpha Blending Engine                                                                                         |
|                                                                                      | Stream<br>RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*), Dante AV-H (*)<br>Animation Transition Effect<br>Video Cropping, Scaling and Alpha Blending Engine<br><b>*Separate License Required</b>                                                              |
| QDEEP                                                                                | AI SDK Integrated Multiple Algorithms and Deep-Learning Models in Various Fields of Applications<br>Face Recognition<br>Objects Detection<br>Objects Segment<br>Optical Character Recognition<br>License Plate Recognition<br>Customizable Video AI Functions Upon Request |
| Software ( Optional )                                                                |                                                                                                                                                                                                                                                                            |
| Xtreamer                                                                             | Web Based User Interface                                                                                                                                                                                                                                                   |
|                                                                                      | Encode / Decode<br>AV1, H.26X                                                                                                                                                                                                                                              |
|                                                                                      | Color Format Adjust<br>444 / 422 / 420, 10Bit / 8Bit Select                                                                                                                                                                                                                |
|                                                                                      | Record<br>MP4, TS                                                                                                                                                                                                                                                          |
|                                                                                      | Stream / Network<br>RTSP, RTMP, HLS, SRT, TS, WebRTC. NDI-HX (*), Full NDI (*),<br>Dante AV-H (*)<br><b>*Separate License Required</b>                                                                                                                                     |
|  |                                                                                                                                                                                                                                                                            |

## Environment

| Development Environment |                   |
|-------------------------|-------------------|
| JetPack                 | 6.2 or Higher     |
| System Spec             |                   |
| Power Supply            | DC Input : 12~24V |
| Power Consumption       | 60W               |
| Operating Temperature   | -20~50 `C         |

## Mechanical

- Dimension of Case:  
124.54mm(W)x115.50mm(H)x305.06mm(D)
- Weight: 3.1kg

