

# XE86T-GEN3

## **Panoramic Al**

## 8MP panoramic 180 °full color turret camera













## System:

Comparing to the XE86T-GEN3 series professional panoramic cameras, the XE86T-GEN3 is a fresh design that target to economical class level.

#### Features:

#### • High resolution with triple streams

Stitch dual 5MP video modules into one camera, providing great details, output max 7.37mega pixels and triple streams.

#### • Less freight, quick deployment.

One MAC address, one housing, one bracket, one cable. Wire once, configure once and maintain one camera. Quick deployment saves installers 50% efforts. The panoramic has built-in bracket that could handle most indoor situations and also has rich accessories that could be chosen for outdoor mounting. In most case, it could just wire one RJ45 cable to PoE source device and no extra power adaptor required.

#### • Large monitoring area without vertical blind area

Two 3.5mm lens with 5MP sensor, provide a large monitoring area, which can identify human face at 6.3m, recognize human face or license plate at 13m and observe human behaviors at 25m. Besides its 180° horizontal view, the vertical 65° view which provides no blind zone for a critical surveillance project, such as criminals or animals crossing window or side wall. One camera could cover a corridor at 4m(W)x10m(L) without blind area. Two pcs of such cameras, back to back installation, could cover a square about 20m (W)x20m(L) without blind.

#### • Full color

Two F1.1 large aperture lens plus 2.2um big pixel sensor provide vivid, clean and clear image at most scenes. In pitch black environment, the warm light LEDs automatically turn on to provide skin, fur, hair and dress color information as court level evidence. The white LEDs support smart-light algorithm to automatically adjust their brightness according to ambient light, which avoid stimulus and complaints from neighborhood.

### • Multiple VCA functions.

Built-in deep-learning engine supports face, human and vehicle detection, classification and identification at real-time and the 1.5TOPS high computing power supports multiple VCA functions such as loitering, crowd density, perimeters, etc.

#### •Built-in audio peripherals

The camera has built-in MIC and speaker, which could spare external audio devices in most cases. The build-in speaker could broadcast predefined warning voices immediately upon events happened and reach up to 30m distance.

#### • ONVIF, API and SDK

Confirm Onvif specifications, interoperability between network video products, regardless of manufacturer.

#### • Rich Interfaces

External TF/Micro-SD Card, Alarm and Audio interface, further extend device capacities as needed.

#### • Strong protection

This camera has full metal housing, IP67 water ingress, IK10 vandalproof, 6KV lightning protection which is suitable for 7x24Hours indoor and outdoor harsh weather working.

#### • Data protection & Regulations

This camera is enhanced data and privacy protection, such as secure boot, web log, strong password, digest signature and authorization, HTTPS, SSL, TLS1.2 protocols, which are compliant with NDAA and other major regulations.

## **Application:**

High-level surveillance application of area intrusion, perimeter protection, which requires no blind zone and full color for 24Hour, such as jail, bank, jewelry store, medicine store, finical office, chemical lab. Suggestion installation height: 3m

# **SPECIFICATION:**

| Camera Module                       |  |   |                             |                    |                   |  |
|-------------------------------------|--|---|-----------------------------|--------------------|-------------------|--|
| Image sensor                        | 1/2.5" progressive scan CMC  | 1/2.5" progressive scan CMOS sensor, x2pcs  |                             |                    |                   |  |
| Max resolution                      | 4096x1800(stitching mode)  |   |                             |                    |                   |  |
| Mini. Illumination                  |  | 4096x1800(stitching mode)  Color; 0.005Lux @ (F1.1, IRE 50); B/W:0.0005 Lux@ (F1.1, IRE 50); 0 Lux with white LED                                 |                             |                    |                   |  |
| Image setting                       | Color. 0.005Lux @ (F1.1, IRE 50), B/W:0.0005 Lux @ (F1.1, IRE 50); 0 Lux with white LED  Saturation, Brightness, Contrast, Sharpness, AGC, etc. adjusted by client |   |                             |                    |                   |  |
| Shutter Speed                       | Saturation, Brightness, Contrast, Sharpness, AGC, etc. adjusted by client  50Hz: 1/25 s – 1/25,000 s; 60Hz: 1/30s-1/30,000s  |   |                             |                    |                   |  |
| White Balance                       |  |   |                             |                    |                   |  |
| Gain control                        | Auto/Manual/Indoor/Outdoor   |   |                             |                    |                   |  |
| Day & Night control                 | Auto/Manual Auto/Manual, time schedule   |   |                             |                    |                   |  |
| Iris control                        |  |   |                             |                    |                   |  |
| SNR                                 | Auto/Manual ≥52dB  |   |                             |                    |                   |  |
| 3D DNR                              |  |   |                             |                    |                   |  |
|                                     | Auto/Manual  PLC HIC DWDP  |   |                             |                    |                   |  |
| AE Enhancement                      | BLC, HLC, DWDR   |   |                             |                    |                   |  |
| Digital zoom  Electrical Stabilizer | 8x   |   |                             |                    |                   |  |
|                                     | N/A  |   |                             |                    |                   |  |
| Optical Defog                       | N/A  |   |                             |                    |                   |  |
| Privacy Mask                        | Eight areas, up to eight masks in the same frame   |   |                             |                    |                   |  |
| Picture overlay                     |  | Logo picture could be overlaid on video with 128x128pixels,24bits JPG format  |                             |                    |                   |  |
| OSD overlay                         | ·  | ght lines, white or red font colo   | r                           |                    |                   |  |
| Angle Adjustment                    | Vertical -5~+5°, Rotation ±7   | 5 °   |                             |                    |                   |  |
| Lens                                |  |   |                             |                    |                   |  |
| Focus Type                          | f=3.5mm, M12 mount, optical distortion <15%; x 2 sets.   |   |                             |                    |                   |  |
| Aperture                            | Fixed, F1.11   | Fixed, F1.11  |                             |                    |                   |  |
| IRCUT type                          | Fixed, White light pass only   |   |                             |                    |                   |  |
| DORI distance                       | Focus length   | Detect(25px/m)  | Observe(63px/m)             | Recognize(125px/m) | Identify(250px/m) |  |
| DOKI distance                       | f=3.5mm  | 63.65m (295 f.t.)   | 25.26m (117 f.t.)           | 12.73m(39 f.t.)    | 6.36m(29.5 f.t.)  |  |
| Panoramic                           |  |   |                             |                    |                   |  |
| Stitching FOV                       | Horizontal FOV:180 °±5%;   | Horizontal FOV:180 °±5%; Vertical FOV: 65 °±5%  |                             |                    |                   |  |
| Stitching Method                    | Alpha-Blending   | Alpha-Blending  |                             |                    |                   |  |
| Working range                       | Best stitching mode work dis   | Best stitching mode work distance is from 1m to 10m. When out of this range, there may slight gaps.   |                             |                    |                   |  |
| Supplement light                    |  |   |                             |                    |                   |  |
| Distance                            | Warm white light 20m (65.6   | Warm white light 20m (65.6 f.t.)  |                             |                    |                   |  |
| Smart Brightness                    | Yes, facial priority   | Yes, facial priority  |                             |                    |                   |  |
| Video codec                         |  |   |                             |                    |                   |  |
| Mainstream                          | 50Hz:(4096x1800, 3840x168  | 50Hz:(4096x1800, 3840x1680,2880x1264,1920x1080,1280x720) 20fps; 60Hz:(4096x1800, 3840x1680,2880x1264,1920x1080,1280x720) 20fps                    |                             |                    |                   |  |
| Sub stream                          | 50Hz: (1280x720, 704x576,  | 50Hz: (1280x720, 704x576, 640x240) 20fps; 60Hz: (1280x720, 704x480, 640x240) 20fps  |                             |                    |                   |  |
| Third Stream                        | 50Hz:(1280x720,704x576, 640x240, 480x240) 25fps; 60Hz:(1280x720,704x480, 640x240, 480x240) 30fps   |   |                             |                    |                   |  |
| Video compression                   | Smart H.265+/H.265/H.264+  | Smart H.265+/H.265/H.264+/H.264/MJPEG   |                             |                    |                   |  |
| H.264 Standard                      | H.264/AVC codec BP/MP/H  | H.264/AVC codec BP/MP/HP, Level 5.1   |                             |                    |                   |  |
| H.265 Standard                      | H.265/HEVC codec MP, level 5.0   |   |                             |                    |                   |  |
| Video Bit Rate                      | 64 Kbps to 16Mbps  |   |                             |                    |                   |  |
| Audio module                        |  |   |                             |                    |                   |  |
| Microphone                          | One built-in microphone. On  | nidirectional .2KΩ36dB@1K   | Hz Sensitivity, THD 115dB S | PL@1KHz            |                   |  |
| Speaker                             |  | One built-in microphone, Omnidirectional ,2KΩ, -36dB@1KHz Sensitivity, THD 115dB SPL@1KHz  One built-in speaker, 4Ω, 2W Nom,750Hz LFR, 100dB@0.1m |                             |                    |                   |  |
| Predefined voice                    | Support customized predefined voice track. Max 10 tracks. One way talk.  |   |                             |                    |                   |  |
| Audio codec                         | Support customized predefine   |   |                             |                    |                   |  |
| Audio compression                   | G.711 A/U  |   |                             |                    |                   |  |
|                                     |  |   |                             |                    |                   |  |
| Audio Bit Rate 64K bps              |  |   |                             |                    |                   |  |
| Network  Protocols                  | HTTP, HTTPS, IPv4/IPv6, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP/IP, UDP, DHCP, PPPoE, P2P, SSL/TLS                                |   |                             |                    |                   |  |
| Usan / Us-t                         |  |   |                             |                    |                   |  |
| User / Host                         | Host Up to sixteen users, three levels: Administrator, Advanced User and Normal User   |   |                             |                    |                   |  |



# XE86T-GEN3

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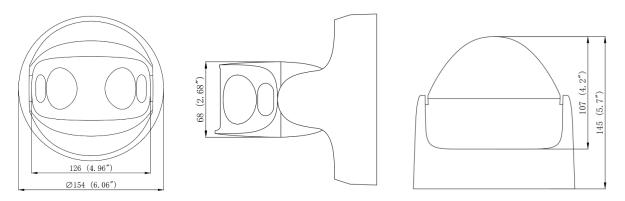
|                            | User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption, IEEE802.1x port-based network access control; IP address      |  |  |
|----------------------------|---|--|--|
| Security Measures          | filtering, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP over HTTPS,    |  |  |
|                            | security audit log, TLS 1.2   |  |  |
| API                        | ONVIF G/S/T, support SDK and third-party management platform  |  |  |
| Client                     | NVR1.4.10, NVMS 2.0; and the third-party client, free iOS, and Android App  |  |  |
| Web Browser                | IE8-11 with plug-in; Edge, Chrome, Firefox with plug-in free  |  |  |
| Events                     |   |  |  |
| Basic event                | Motion detection, video tampering alarm, alarm input, alarm output, exception (Network disconnected, IP address conflict, SD full, SD error)        |  |  |
| Smart event                | Line crossing detection, intrusion detection, region entrance detection, region exiting detection (ver5.1.1)  |  |  |
| Alarm Linkage              | Alarm actions, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card, Send Email, etc.                 |  |  |
| Deep learning function     |   |  |  |
| Face capture               | Detecting multiple faces in the same scene. Outputting the best face snapshots by precise detecting, capturing and grading moving faces.            |  |  |
| Face comparison            | (Default off) Yes   |  |  |
| Perimeter protection       | Line crossing, Intrusion, Region entrance, Region exiting. Support alarm triggering by specified type. (ver5.1.1)                                   |  |  |
| Meta information           | N/A   |  |  |
| Road-traffic and vehicle d | etection  |  |  |
| Road traffic               | Support vehicle detection and capture(ver5.1.1).  |  |  |
| Road Statics               | N/A   |  |  |
| System Integration         |   |  |  |
| Alarm Interface            | 1 Alarm input (Dry contact); 1 Alarm output   |  |  |
| Aux. audio interface       | 1ch LINE IN, 2.0-2.4Vpp, impedance 1K $\Omega$ ; 1ch LINE OUT, impedance $600\Omega$  |  |  |
| Network Interface          | 1 RJ45 10M/100M Adaptive Ethernet   |  |  |
| SD Card Slot               | One MicroSD slot and chamber, up to 256G  |  |  |
| RS 485                     | N/A   |  |  |
| Aux. video interface       | N/A(BNC/CVBS/TVI)   |  |  |
| Reset button               | Yes   |  |  |
| Heater &Fan                | N/A   |  |  |
| Frost removal              | Desiccant, vacuuming  |  |  |
| Water removal              | Lotus anti-water lens cover coating   |  |  |
| General                    |   |  |  |
| General                    | Czech; English, German; Hungarian; Italian; Japanese; Korean; Portuguese, Polish; Russian, Romanian, Spanish; Spanish (Mexico); Simplified Chinese; |  |  |
| languages                  | Turkish; Traditional Chinese, etc.  |  |  |
| Power consumption          | Avg. 4watt. Max 12watt. (speaker on+ white light on)  |  |  |
| Power supply               | DC12V±15% 1500mA. Or PoE (802.3.af, class 1), not same time   |  |  |
| Working condition          | Day: -40 °C~55 °C (-40 °F ~ 131 °F); Night: -40 °C ~40 °C; Cold start>=-30 °C (1 hour waiting);90% RH   |  |  |
| Storage condition          | -40°C ~ 70°C; ≤ 95% RH  |  |  |
| Housing Material           | Main-body: Aluminum Alloy (ADC12); Lens Cover: Polycarbonate  |  |  |
| Weight& Dimensions         | Approx. 1.3 Kg (2.86 lb.), Ø154mm x 145mm (Ø 6.06-inch x 5.7 inch)  |  |  |
| Approval                   | Appear to any (2000 to ), province a troume (2000 men a or) meny  |  |  |
| Phi.o.m                    | FCC SDoC (47 CFR Part 15, Subpart B).   |  |  |
| EMC                        | CE-EMC (EN 55032: 2015, EN 61000-3-2: 2019, EN 61000-3-3: 2013, EN 50130-4: 2011+A1: 2014).   |  |  |
|                            | KC (KN 32:2015, KN 35: 2015)  |  |  |
|                            | CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014).  |  |  |
| Certification              | CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013, IEC 62368-1:2014).  CE-LVD (EN 62368-1:2014+A11:2017),  |  |  |
|                            | BIS (IS 13252(Part 1):2010+A1:2017);  |  |  |
| Environment                | CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)   |  |  |
| Protection                 | IP67(IEC 60529-2013), IK10 (IEC 62262:2002),6000V Lightning Protection, Surge Protection and Voltage Transient Protection                           |  |  |

# Ordering information:

| TD-6242E3N(A/PE/WR2) | 8MP 180 ° Panoramic Stitching Full-color Turret Camera. MIC &Speaker,IP67/IK10, |
|----------------------|---|
| ID-0242E3N(A/FE/WK2) | DC12V/PoE,include fast mounting adaptor,not include 12V power adaptor.          |



## Dimensions(mm(inch)):



<sup>\*</sup> All pictures and texts are for reference only. Actual product may vary due to product enhancement.