# INTELLIGENT EDGE ANALYSIS ALL-IN-ONE MACHINE











XEN-AI-SG-32

XEN-AI-SG-16

XEN-AI-SG-08

XEN-AI-SG-04

The Xenus AI edge intelligent analysis device adopts the latest high-performance NPU intelligent chip that can achieve a maximum computing power of 32 TOPS (INT8).

The Xenus AI intelligent algorithm covers various algorithms for scenarios such as parks, communities, construction sites and campuses which can be flexibly combined and configured according to specific needs.

The video intelligent comprehensive management platform supports front-end device management, real-time video preview, alarm pushing, evidence capture, online loading and optimization of algorithms, data situation analysis for large screen display – with a simple device operation and plug-and-play capability.

Additionally, the device has rich northbound API interfaces to empower large-scale upper-level business applications.

#### **PRODUCT FEATURES**

XEN-AI-SG-32	XEN-AI-SG-16	XEN-AI-SG-08	XEN-AI-SG-04	
32 TOPS INT8 peak computing power	17.6 TOPS INT8 peak computing power	10.6 TOPS INT8 peak computing power	6 TOPS computing power peak	
32Ch Real Time Intelligent Video Analysis	16Ch Real Time Intelligent Video Analysis	8Ch Real Time Intelligent Video Analysis	4Ch Real Time Video Analysis	
<ul> <li>32Ch H.265 / H.264 : 1080p @ 25 fps</li> <li>Video decoding</li> </ul>	• 32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding	8Ch H.265 / H.264: 1080p @ 25 fps     Video decoding	<ul> <li>4Ch H.265 / H.264:</li> <li>1080p @ 25 fps Video decoding</li> </ul>	
● 12Ch H.265 / H.264 : 1080p @ 25 fps Video coding	• 2Ch H.265 / H.264: 1080p@ 25 fps Video coding	1Ch H.265 / H.264: 1080p @ 25 fps     Video coding	Memory : 8 Gb     Storage : 128 Gb eMMc	
Supports loading up to 3 different algorithms simultaneously with a single camera.				
Supports for camera intelligent round robin mode.				
Supports up to 32 cameras, executing 32 analysis tasks simultaneously.				
<ul> <li>Based on INT8 high-precision quantization, it has higher throughput and energy efficiency compared to mainstream intelligent computing platforms in the industry.</li> </ul>				
<ul> <li>Adaptable to a variety of high-precision Al algorithms, providing a cost-effective edge computing solution tailored for</li> </ul>				
intelligent communities, smart parks, and smart construction sites, among other industry scenarios.				
<ul> <li>Supports Caffe / TF/ Pytorch / Mxnet / Padde, mainstream network model supports, and custom operator development.</li> <li>Supports Docker containerization for rapid deployment of algorithm applications.</li> </ul>				
	32 TOPS INT8 peak computing power  32Ch Real Time Intelligent Video Analysis  32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  Supports loading up to 3 different all Supports for camera intelligent round Supports up to 32 cameras, executir If the number of analysis tasks exceed Based on INT8 high-precision quant intelligent computing platforms in the Adaptable to a variety of high-precisi intelligent communities, smart parks  Supports Caffe / TF/ Pytorch / Mxne	<ul> <li>32 TOPS INT8 peak computing power</li> <li>32Ch Real Time Intelligent Video Analysis</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video coding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video coding</li> <li>32Ch H.265 / H.264 : 1080p @ 25 fps Video coding</li> <li>Supports loading up to 3 different algorithms simultaneously with a single case of the simulation of the si</li></ul>	32 TOPS INT8 peak computing power  17.6 TOPS INT8 peak computing power  16Ch Real Time Intelligent Video Analysis  16Ch Real Time Intelligent Video Analysis  32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video coding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decoding  12Ch H.265 / H.264 : 1080p @ 25 fps Video decod	

Туре	XEN-AI-SG-32	XEN-AI-SG-16	XEN-AI-SG-08	XEN-AI-SG-04	
Intelligent Algorithms	Face Recognition / Fire detection / Smoke detection / Smoking detection / Phone usage detection / Personnel using mobile phones detection / Mask-wearing detection / Personnel leaving or sleeping on duty detection / Personnel falling detection / Personnel static elimination / Area people counting / Area intrusion detection / Uniform detection / Helmet detection / Safety helmet and reflective clothing detection / Electric scooter detection / Standardized parking (illegal parking detection) / Entrance and exit passenger flow statistics / Perimeter climbing intrusion / Abnormal displacement / Safety net hanging detection and other algorithms				

### **APPLICATION SCENARIO**







Smart Industrial Park



Smart Construction Site



Smart Campus



Smart Gas Station



Smart Factory Grid

## PRODUCT PARAMETERS

Туре	XEN-AI-SG-32	XEN-AI-SG-16	XEN-AI-SG-08	XEN-AI-SG-04
CPU	8 core ARM A53 @ 2.3 GHz	8 core ARM A53 @ 2.3 GHz	8 core ARM A53 @ 2.3 GHz	Cortex-A76 + Cortex-A55 8 core 2.4 GHz
Al Computing Power	<ul> <li>32 TOPS (INT8)</li> <li>16 TFLOPS (FP 16 / BF 16)</li> <li>2 TFLOPS (FP 32)</li> </ul>	• 17.6 TOPS (INT8) • 2.2 TFLOPS	• 10.6 TOPS (INT8) • 1.3 TFLOPS	6 TOPS peak computing power
Encoding & Decoding	32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding 12Ch H.265 / H.264 : 1080p @ 25fps Video encoding	32Ch H.265 / H.264 : 1080p @ 25 fps Video decoding 2Ch H.265 / H.264 : 1080p @ 25 fps Video encoding	8Ch H.265 / H.264 : 1080p @ 25 fps Video decoding 1Ch H.265 / H.264 : 1080p @ 25 fps Video encoding	8K and Dual 4K Video Coding  4Ch 4K Video decoding
Memory	16 GB	12 GB	6 GB	8 GB
Storage	64 GB eMMC Supports extended storage:  • M.2 SATA 3.0 SSD (2242) x 1  • TF card holder x 1	32 GB eMMC	32 GB eMMC	128 GB eMMC
Interface	<ul> <li>2.4 GHz / 5 GHz Dual frequency WiFi, 802.11a / b / gn / ac, Scalable 4G LTE (Mini PCle interface), 5G (M.2 interface),</li> <li>Support M.2 SATA 3.0 interface Scalable 2242 SATA SSD) × 1</li> <li>Support USB 3.0 (Current limiting 1A) × 2 USB 2.0 (Current limiting 500mA) × 2</li> </ul>	10 / 100 / 1000 Mbps self-adaption x 2     Support USB / HDMI / -SA     TA / RS-232 / RS-485 / TF     LTE Optional	<ul><li>1 x 2.5G LAN</li><li>1 x UART(Type-C)</li><li>1 x Micro SD</li></ul>	<ul> <li>Port 4G, LTE (Mini PCle)</li> <li>2242 SATA SSD x 1</li> <li>USB 3.0 x 2, USB 2.0 x 1</li> <li>RJ45 x 2, 1000M HDM x1</li> </ul>
System		Ubuntu Linux system		Debian system
Size	210 × 130 × 44.5 mm	188 × 148 × 44.5 mm	185 × 170 × 43.6 mm	235 × 150 × 62.5 mm

Туре	XEN-AI-SG-32	XEN-AI-SG-16	XEN-AI-SG-08	XEN-AI-SG-04	
Power Dissipation	20 W		18 W	10 W MAX	
Deep Learning Framework	TensorFlow / PyTorch / Paddle / Caffe / ONNX / MXNet / Tengine / DarkNet				
Environment	Working temperature: -20 $^{\circ}$ C $\sim$ 60 $^{\circ}$ C				
Software Platform	<ul> <li>Supports switching between basic mode and visualization mode freely.</li> <li>Supports 1/9 screen real-time preview function.</li> <li>Supports multiple split-screen display functions.</li> <li>Supports large-screen display of various types of data analysis.</li> <li>Supports closed-loop function for handling alarm events.</li> <li>Supports management of various types of front-end devices.</li> <li>Supports algorithm configuration management and algorithm analysis task management.</li> <li>Supports online installation, loading, and upgrading of algorithms.</li> <li>Supports platform logo / name custom configuration.</li> <li>Supports loading maps to replace on-site scene images.</li> <li>Supports online annotation of monitoring equipment on the map.</li> <li>Supports role and permission, user online management.</li> <li>Supports detailed parameter configuration of algorithms, detection area ROI / custom label functions (unlimited number of ROIs, ROI polygon configuration).</li> </ul>				

## Sole Distributor by :





+62 813 8280 8208



info@gap-indonesia.co.id