

# AC-SG50-19

150 Megapixel effective array camera



	Resolution 150 MP
	Person Detection 1.3KM
	Vehicle Detection 5KM
	Ship Detection 4KM
	UAV Detection 400M

## Overview

The AC-SG50-19 Array Computational Camera features an advanced multi-camera array design. Multiple high-resolution camera modules are precisely arranged to work as a single system. This architecture overcomes the physical limitations of traditional single-lens cameras. By seamlessly stitching multiple 4K (8MP) video streams, it generates a real-time gigapixel feed. The result is exceptional image clarity across ultra-wide fields of view. Every detail remains sharp without compromising overall scene coverage.

The AC-SG50-19 is engineered to deliver distortion-free panoramic monitoring. It enables simultaneous wide-area surveillance and high-precision identification. Ideal for large-scale and security-critical environments. The system sets a new benchmark for comprehensive visual intelligence.

## Application



## Functions

### Gigapixel Video

Based on the theory of computational photography, multiple 4K (8.3 megapixels) videos are mosaicked into a gigapixel level of high resolution real-time panoramic video.

### Ultra-large Scene Monitoring

The AC-SG50-19 can achieve distortion-free monitoring for ultra-large area and provide high-quality imaging for each detailed area in the scene.

### Ultra-high Resolution

With the design of array arrangement, the AC-SG50-19 breaks the resolution limitation of single optical lens and sensor, while realizing the monitoring requirements of gigapixel ultra-high resolution in ultra-large scenarios.

### AI Analysis

The AC-SG50-19 can full-time automatically detect, locate, identify, track and alarm various types of targets such as people, vehicles, ships and aircraft in ultra-large scenarios.

### Easy Deploying

One JMC device can cover a large area, effectively reducing the workload of civil construction and equipment installation & debugging.

### Flexible Application

The video of AC-SG50-19 can be displayed on mosaic screens, computers, mobile phones, tablet computers and etc. 20 users can operate the panoramic video at the same time with the personalized and interactive operation.

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## Technical Specification

Technical Parameters	AC-SG50-18
<b>Essential Parameters</b>	
Type of Sensor	830 million 1/1.8 " image sensor
Number of Lens	19 (1 panoramic lens+18 detail lenses)
Field of View	Horizontal: 48.3°, Vertical: 13.8°
Minimum Illumination	Color mode: 0.01 lux @ F1.5 (AGC ON) Black and white mode: 0.001 lux @ F1.5 (AGC ON)
Day and Night Mode Switching	ICR infrared filter
Electronic Shutter	Automatic/manual (adjustment range: 1s to 1/1000s)
Image Processing	Video adjustment, automatic/manual/outdoor white balance, 3D digital noise reduction, backlight compensation, strong light suppression and fog reduction
<b>Video Indicators</b>	
Pixel Value	150 million
Resolution	23040×6480
Frame Rate	50HZ: 1-25fps, 60HZ: 1-30fps
Video Compression Encoding	H.264/H.265
Date Rate	Color mode: 0.01 lux @ F1.5 (AGC ON)
Output Rate	200-400Mbps

<b>Network Interfaces</b>	
Support Protocol	TCP/IP, HTTP, RTSP, RTP, RTCP
Interface Protocol	RTSP, GB28181, ONVIF
Network Interface	One RJ45 1000M Ethernet port
<b>General Specifications</b>	
Working Temperature and Humidity	Working temperature: -40°C ~ 70°C Humidity: 0%~95%(non condensing)
Protection Design	IP67, lightning protection, surge prevention, antistatic protection
Power Consumption	DC24V±10%、90W
External Size	406×214×264mm
Net Weight	11.5kg

