

AC-SG50-19

150 Megapixel effective array camera



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.

				
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



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Technical Specification

Technical Parameters	AC-SG50-18
Essential Parameters	
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
Video Indicators	
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

Network Interfaces	
Support Protocol	TCP/IP, HTTP, RTSP, RTP, RTCP
Interface Protocol	RTSP, GB28181, ONVIF
Network Interface	One RJ45 1000M Ethernet port
General Specifications	
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

