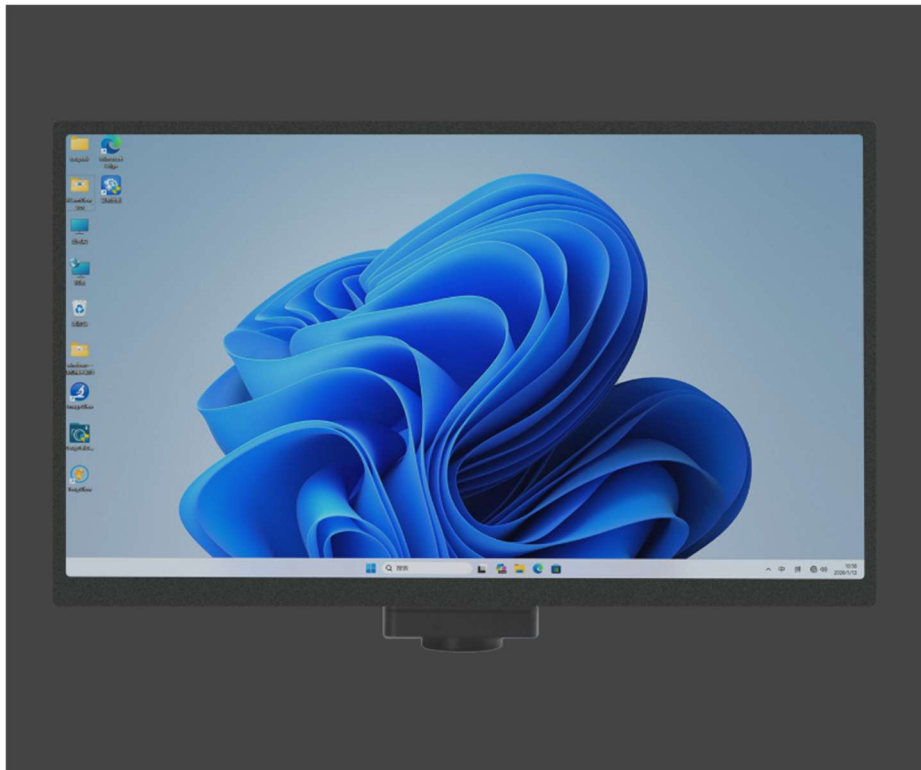




CAMERA SCOPE-AIOCAMW SERIES





Product Introduction

AIOCAMW is a multifunctional all-in-one camera that integrates a 13.3-inch display and an image acquisition system. It supports portable microscopy image acquisition and processing. AIOCAMW is the abbreviation of All-in-One Camera with Windows system.

Product Features

- Standard C-mount camera and display are integrated to reduce cabling and simplify installation
- Built-in Intel N150 processor with turbo frequency up to 3.6 GHz
- Preinstalled Windows system with touchscreen support and optional wireless keyboard/mouse
- Uses Sony CMOS sensors and supports large-format high-resolution sensor options with model customization
- Supports HDMI2.0 or Type-C synchronous 4K@60 Hz video output
- Supports Gigabit Ethernet and WiFi6 networking and works with XCamView digital interactive networking software for teaching workflows
- Provides advanced video and image processing software: ToupView and ToupLite
- Provides Windows SDK supporting native C/C++, C#/VB.Net, DirectShow, and TWAIN APIs

Order Code	Sensor & Size(mm)	Effective Pixels	Output Resolution
AIOCAMW8MPA	Sony IMX678(C) 1/1.8" (7.68x4.32mm)	2.0x2.0μm	8MP
AIOCAMW12MPA	Sony IMX676(C) 1/1.6" (7.07x7.07mm)	2.0x2.0μm	12MP
AIOCAMW20MPA	Sony IMX283(C) 1" (13,06x8,76mm)	2.4x2.4μm	20MP

Order Code	Frame Rate	Output Interface	Lens Mount	Storage Support
AIOCAMW8MPA	45 fps @ 3840×2160; 60 fps @ 1920×1080	HDMI2.0 ; USB3.2 ; NETOWROK ; Wi-Fi6	C-Mount	128 GB SSD / USB Flash Drive
AIOCAMW12MPA	27 fps @ 3536×3536; 60 fps @ 1768×1768	HDMI2.0 ; USB3.2 ; NETOWROK ; Wi-Fi6	C-Mount	128 GB SSD / USB Flash Drive
AIOCAMW20MPA	15 fps @ 5440×3648; 50 fps @ 2736×1824; 60 fps @ 1824×1216	HDMI2.0 ; USB3.2 ; NETOWROK ; Wi-Fi6	C-Mount	128 GB SSD / USB Flash Drive

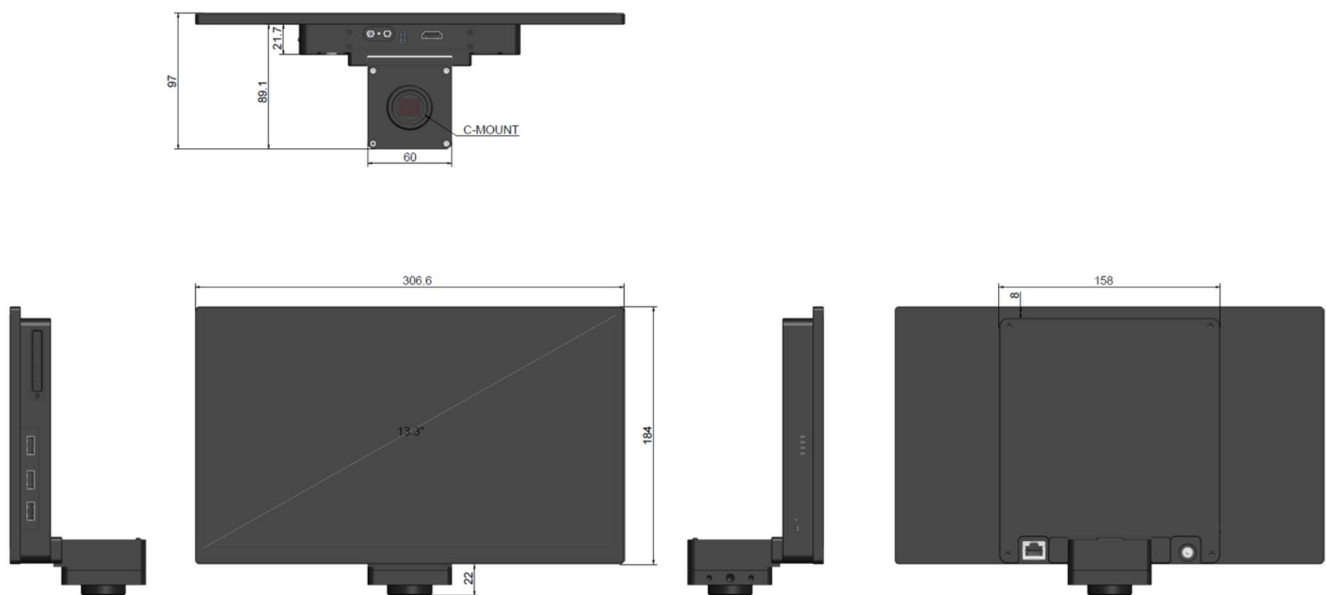
Featured Functions

- Integrated 13,3-inch touchscreen display
- Windows 11 Pro with Intel N150 Processor
- HDMI2.0/Type-C 4K@60 synchronous output
- Gigabit LAN + Wi-Fi6 networking
- C-mount camera module with Sony CMOS Sensor
- Touptview/Touplite and Windows SDK Support

Model Parameter Overview

Ordering Code	Sensor Size	Pixel (um)	G Sensitivity / Dark Signal	Output (FPS/Resolution)	Sampling Average	Exposure Time
AIOCAMW8MPA	IMX678(C) 1/1.8" (7.68×4.32)	2.0×2.0	3541mv with 1/30s 0.15mv with 1/30s	45@3840×2160 60@1920×1080	1×1 2×2	0.02 ms~15 s
AIOCAMW12MPA	IMX676(C) 1/1.6" (7.07×7.07)	2.0×2.0	3637mv with 12 bit converted value(HCG) 0.15mv with 1/30s	27@3536×3536 60@1768×1768	1×1 2×2	0.013 ms~15 s
AIOCAMW20MPA	IMX283(C) 1" (13.06×8.76)	2.4×2.4	462mv with 1/30s 0.21mv with 1/30s	15@5440×3648 50@2736×1824 60@1824×1216	1×1 2×2 3×3	0.1 ms~15 s





Interface	Description
Power	DC12V5A (5.5mm×2.5mm)
HDMI	HDMI-A 2.0 video output, supports 3840×2160@60Hz
Ethernet	RJ45 1000Mbps Ethernet interface
Type-C	Supports 3840×2160@60Hz video output
USB	1 × USB3.2 and 2 × USB2.0 for USB flash drive, keyboard, mouse, and other peripherals
HP	Headphone output, standard 3.5mm interface
MIC	Microphone input, standard 3.5mm interface
Power button	Tap to power on and start the system
LED	Indicates system working status

Function Parameter	Value
Operating system	Windows 11 Pro
CPU	Intel® Processor N150
CPU base frequency	0.8GHz
Max turbo frequency	3.6GHz
CPU cores / threads	4 cores / 4 threads
Memory	8GB LPDDR5
Touch mode	Capacitive touch G+FF, supports multi-touch
Speaker power	8 Ohm, 1W
Storage	128GB SSD
Wireless network	WiFi IEEE 802.11a/b/g/n/ac/ax + BT5.0
Power consumption	Operating power 40W; standby power 0.7W

Display Specifications	
Display size	13.3 inch 1920×1080P 60Hz
Display area	293.76(H) × 165.24(V)
Pixel pitch	0.153 × 0.153 (H×V)
Brightness	400 cd/m ² (Typ.)
Contrast ratio	15000:1 (Typ.)
Refresh rate	60Hz
Display colors	16.7M (8-bit)
Color gamut	71% NTSC (Typ.)
Response time	14 ms
Camera Operating Environment	
Operating temperature	-10 °C ~ 50 °C
Storage temperature	-20 °C ~ 60 °C
Operating humidity	10%RH ~ 90%RH, non-condensing
Storage humidity	5%RH ~ 95%RH, non-condensing

AIOCAMW All-in-One Camera with Display | Packing List

Standard Packing List

- A** Carton size: L:45 cm W:27.8 cm H:9 cm (1 pcs, 1.68 kg/box)
- B** AIOCAMW series all-in-one camera ×1
- C** Power adapter: input AC 100~240 V 50 Hz/60 Hz, output DC 12 V 5 A
 CN: POWER-12V5A(HKA06012050-0A7) + CN power cord
 US: POWER-12V5A(HKA06012050-0A7) + US power cord
 EU: POWER-12V5A(HKA06012050-0A7) + EU power cord
 UK: POWER-12V5A(HKA06012050-0A7) + UK power cord

Optional Accessory

- D** USB wireless keyboard and mouse kit

