OPTO EDU A59.2268 13.3" LCD Digital Camera 8.0M 4K

Basic Information

- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE, Rohs
- Model Number: A59.2268
- Minimum Order Quantity: 1 pc
- Price: FOB $1~1000, Depend on Order Quantity
- Packaging Details: Carton Packing, For Export Transportation
- Delivery Time: 5~20 Days
- Payment Terms: T/T, West Union, Paypal
- Supply Ability: 5000 pcs/ Month

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Product Specification

- Interface Or Button: Function Description
- USB 2.0: Connect USB Mouse For Easy Operation With Embedded XCamView Software
- USB Video: Connect PC Or Other Host Device To Realize Video Image Transmission
- ON/OFF: Power Switch (Short Press To Turn On, Long Press To Turn Off)
- LED: LED Status Indicator
- MENU: Display Menu Key
- Video Output Interface: Function Description
- Highlight: **4K Digital Camera**, **13.3" LCD Digital Camera**, **8.0M Digital Camera**

Product Description

A59.2268 Camera Intelligent Control Platform(CICP) help manual ,Please click the left connection to download!!

A59.2268 is a SoC Camera intelligent control platform launched by ToupTek Photonics that integrates powerful computing power and Camera control functions. The HCMOS series cameras developed by ToupTek Photonics only need a standard HDMI cable to connect with the A59.2268 Camera intelligent control platform and complete the functions of Camera control, video display, image capture, video recording and measurement.

The A59.2268 Camera intelligent control platform is equipped with multi-touch TFT-LCD displays of different sizes and resolutions, which can get rid of the user's dependence on the keyboard and mouse during operation, and use finger touch operation to realize the control of HCMOS cameras or other peripherals manipulation.

The combination of A59.2268 series Camera intelligent control platforms and HCMOS series cameras are expected to be used in various products such as intelligent detection, processing, analysis and control, covering public security criminal investigation, precision agriculture and forestry, water quality monitoring, remote sensing and telemetry, industrial inspection, cultural relics identification, medical treatment, etc. This combination has extremely high commercial prospects and value.

Model	Processor/th>	Memory/Storage	Display	Computing Power	System Version
CamPI2K133A	RK3399	2G LPDDR3/32GEMMC	1080P multi-touch display	NA	Android 10.0

Modular high scalability: The core board and the interface board are designed independently, while focusing on the core Camera functions, it has the characteristics of high scalability and embeddability;

Simple image transmission: Only one HDMI cable is needed to connect with HCMOS series cameras, which can perfectly realize the control of the camera, the transmission, display and processing of image and video data, eliminating the trouble of hardware compatibility and Camera driver problems, seamlessly integrated with the camera, providing users with worry-free mobile image acquisition solutions;

Openness of product development: Users can develop and run their own image processing applications through the supplied SDK, realize on-site industrial control through standard user interfaces, process image and video data according to preferences and needs, and finally submit scientific reports, completely liberated from camera hardware problems and image or video data capture problems, focus on problem-oriented image processing and analysis, and quickly develop user own target equipment;

Portability of product use/integration: Compact size ensures portability for product use and integration;

Versatility of product application: It can be applied to various scenarios, such as microscope observation, biological image analysis, industrial inspection and various intelligent image analysis equipment, to meet different development needs.

A59.2268 Specification

A59.2268 13.3'' LCD Digital Camera, HDMI + Mouse Measure, USB3.0, WIFI, 8.0M 4K Specification	
Interface or Button	Function Description
USB 2.0	Connect USB mouse for easy operation with embedded XCamView software
USB Video	Connect PC or other host device to realize video image transmission
USB3.0	Connect USB flash drive to save pictures and videos
	Connect 5G WiFi module to transfer video wirelessly in real time
	Connect USB microphone for audio and video recording
ON/OFF	Power switch (Short press to turn on, long press to turn off)
HDMI OUT	Comply with HDMI2.0 standard. Used to extend 4K/1080P format video output and supporting automatic switch between 4K and 1080P format according to the connected monitors
LED	LED status indicator
+/-	Display brightness adjustment button
MENU	Display menu key
DC 12V2A	Power adapter connection (12V/2A)
Video Output Interface	Function Description
HDMI Interface	Synchronize video output through HDMI OUT interface, comply with HDMI2.0 standard; 60fps@4K Or 60fps@1080P
WiFi Interface	Connecting 5G WiFi adapter (USB3.0 slot) in AP/STA mode
USB Video Interface	Connecting USB Video port of PC for video transfer
	H264/MJPEG format video
Other Function	Function Description
Video Saving	Video format:8M (3840*2160) H264/H265 encoded MP4 file
	Video saving frame rate: 60fps in Low Delay mode; 30fps in WDR mode
Image Capture	8M (3840*2160) JPEG/TIFF image in USB flash drive
Measurement Saving	Measurement information saved in different layer with image content
	Measurement information is saved together with image content in burn in mode

ISP	Exposure(Automatic / Manual Exposure) / Gain, White Balance(Manual / Automatic / ROI Mode), Sharpening, 3D Denoise, Saturation Adjustment, Contrast Adjustment, Brightness Adjustment, Gamma Adjustment, Hue Adjustment, Color to Gray, 50HZ/60HZ Anti-flicker Function
Image Operation	Zoom In/Zoom Out (Up to 10X), Mirror/Flip, Freeze, Video EDF, Cross Line, Overlay, PIP, Browser (including Picture Browsing, Video Playback, Video Compare, Picture Compare, Picture EDF, Image Processing), Measurement Function
Embedded RTC(Optional)	To support accurate time on board
Restore Factory Settings	Restore camera parameters to its factory status
Multiple Language Support	English / Simplified Chinese / Traditional Chinese / Korean / Thailand / French / German / Spanish / Japanese / Italian / Russian / Dutch / Portuguese
Software Environment under WiFi/USB Video Output	
White Balance	Auto White Balance
Color Technique	Ultra-Fine Color Engine
Capture/Control SDK	Windows/Linux/macOS/Android Multiple Platform SDK (Native C/C++, C#/VB.NET, Python, Java, DirectShow, Twain, etc)
Recording System	Still Picture or Movie
Operating System	Microsoft® Windows® 8 / 8.1 / 10 / 11(32 & 64 bit)
	OSx(Mac OS X)
	Linux
PC Requirements	CPU: Equal to Intel Core2 2.8GHz or Higher
	Memory: 4GB or More
	Ethernet Port: RJ45 Ethernet Port
	Display:19" or Larger
	CD-ROM
Operating Environment	
Operating Temperature (in Centidegree)	-10°~ 50°
Storage Temperature (in Centidegree)	-20°~ 60°
Operating Humidity	30~80%RH
Storage Humidity	10~60%RH
Power Supply	DC 12V/2A Adapter

Precise touch

more sensitive

- Quasi-industrial-grade touch solution, 10-point capacitive touch, 3mm tempered glass cover
- Effective anti-fog and dust-proof, high resolution, more sensitive response, no blind spots
- Smooth surface treatment, high stability, Superior experience

Industrial-grade design

7*24 hours of stable operation

- Safe and reliable communication, ensuring uninterrupted device network communication
- Pure flat installation, easy to integrate with the product
- High and low temperature resistance, IP65 dustproof and waterproof
- Lower heat generation and power consumption

Powerful hardware and software integration
easily meet various needs

- Equipped with powerful RK3399 six-core 64-bit CPU, over 2.0GHz
- 2GB DDR3 memory and 32GB EMMC storage, high computing capability and stability
- 4K VP9 and 4K 10bits H265/H264 video hardware decoding up to 60fps
- Support 1080P WMV, MPEG-1/2/4, VP8 format video hardware decoding
- 1080P H.264 and VP8 video hardware encoding acceleration
- Multiple video inputs and outputs
- Built-in Android 10.0 operating system, compatible with 99% industry software.
- Dual USB3.0 Type C ports
- Supports PCIe 2.1b

Peripheral interfaces and Specifications of A59.22682K133A Camera intelligent control platform

| No	Name and Function
1	Recovery key:Used together withPower key13, press both at the same time to enter the firmware burning mode.
2	SD card slot:
3	USB 3.0 A port 1:External mouse, keyboard, U disk and other peripherals can be connected.
4	USB-C port: External mouse, keyboard, U disk and other peripherals can be connected; it can be connected to the DP port of the monitor to display the A59.22682K133A interface; It can be connected to a PC, and the built-in storage of A59.22682K133A can be accessed on the PC side; in the firmware burning mode, the firmware can be burned on the PC side.
5	HDMI 2.0 A port 1:HCMOS series Camera input interface 1.
6	12V DC5525:Power input interface.
7	Status indicator: The left side is the power indicator light, which is off when the power is not connected, and is always red when the power is connected; The right side is the running indicator light, which goes out when the machine is turned off, and the green light flashes when it is turned on.
8	2.5mm audio port: External shutter release.
9	10/100/1000Mbps adaptive network port
10	USB 2.0 A port 1:External mouse, keyboard, U disk and other peripherals can be connected.
11	HDMI 2.0 A port 2:HCMOS series Camera input interface 2.
12	USB 3.0 A port 2:USB3.0 image data interface.The function is not yet available.
13	Power button: Short press to power on; long press to power off.

Model	Sensor & Size	Pixel (µm)	G Sensitivity/Dark Signal	FPS	FPS	Exposure
8.3MPA	8.3M/IMX678© 1/1.8"(7.68x4.32)	2.0x2.0	3541(mV/lx/s) 0.15mv with 1/30s	42@1920x1080	3840x2160	0.02ms~15s
8.3MPB	8.3M/IMX585 1/1.2"(11.2x6.3)	2.9x2.9	5970mv with 1/30s 0.15mv with 1/30s	42@1920x1080	3840x2160	0.02ms~15s
20MPA	20M/IMX283 1" (13.2x8.9)	2.4x2.4	TBD	TBD	TBD	TBD
45MPA	45M/IMX294 4/3"(17.26x13.03)	4.6x4.6	108mv with 1/30s 0.03mv with 1/30s	42@1920x1080	8160*5616	0.02ms~15s
4.2MMB-RAW	4.2M/GSENSE2020B SI (M,UV, RS)1.2"(13.31x13.31)	6.5x6.5	$1.1 \times 10_8$ (e-/((W/m2).s)) QE93.7%@550nm 80(e-/s/pix)	18@2048x2048 18@1024x1024	2048x2048 1024x1024	0.15ms-15s

4.2MMB-YUV	4.2M/GSENSE2020B SI (M,UV, RS) 1.2"(13.31x13.31)	6.5x6.5	$1.1x10^8$ (e-/((W/m2).s)) QE93.7%@550nm 80(e-/s/pix)	18@2048x2048 18@1024x1024	2048x2048 1024x1024	0.15ms-15s
1.3MMA	1.3M/IMX990(M) 1/2"(6.40x5.12)	5.0x5.0	121mV with 1/30s 1.0mV with 1/30s	35@1280x1024 35@640x512	1280x1024 640x512	50us~3600s

2. Connecting camera to computers with USB3.0 port

Install Image View on your PC or install View App on the mobile device; Run the software Image View, clicking the camera name in the Camera List group to start the live video
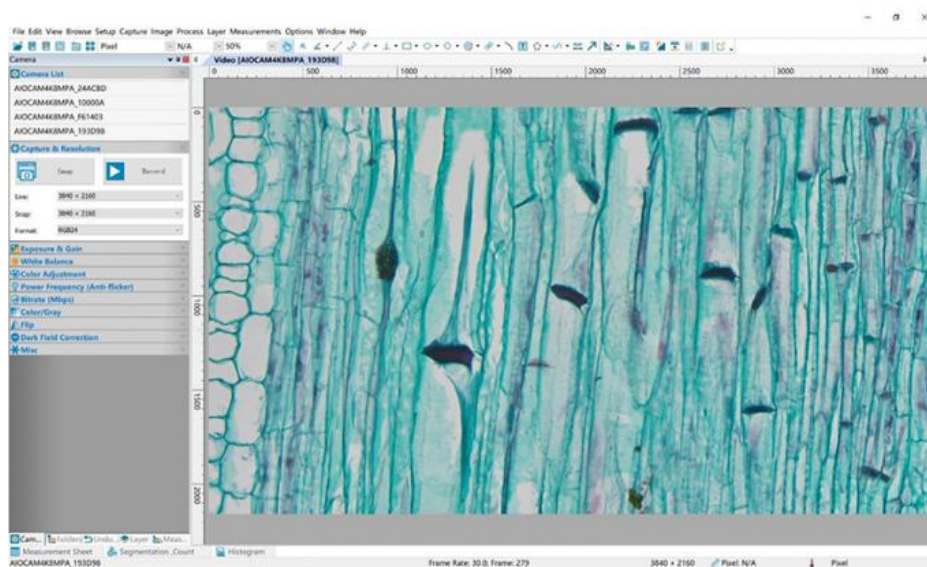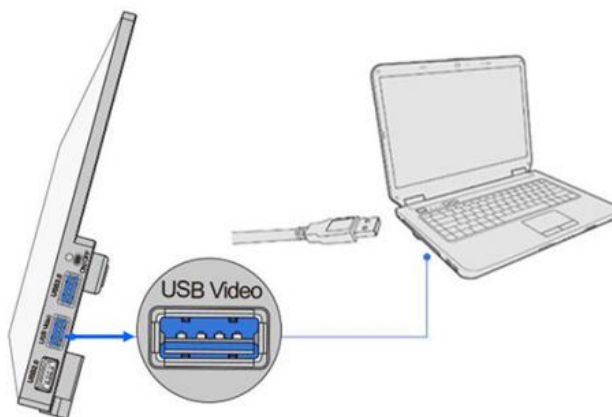
3. Camera working in WiFi mode (AP mode)

Plug the USB WiFi adapter into the camera's USB3.0 port. Install Image View on your PC or install View App on the mobile device; Run the software View/ Lite,A59.2268 series all-in-one cameras will be automatically recognized. The view live image.

4. Connecting multi-cameras to the router through the WiFi STA mode for the network application

Multi A59.2268 series all-in-one cameras are connected to router through the WiFi STA mode, and the user can control the HDMI camera on the computer or mobile device through WiFi.

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Application of A59.2268 + HCMOS series camera

A59.2268 is placed on the
workbench separately

A59.2268 is directly fixed on
the HCMOS camera

A59.2268 is directly fixed on
the HCMOS camera

A59.2268 is fixed on the side
pole of TPS

A59.2268 placed on the workbench

A59.2268 directly fixed on the camera
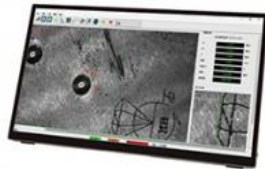
Application of A59.2268 + HCMOS series camera
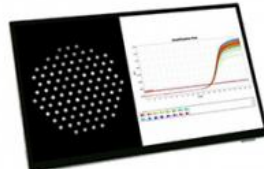

A59.2268 and Smart Manufacturing
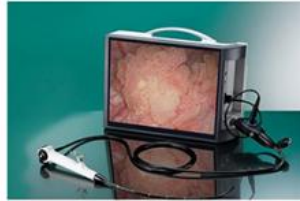
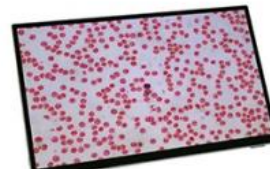

A59.2268 and Endoscopy Applications

A59.2268 and Industrial Videoscope Application

A59.2268 and Hardness Tester
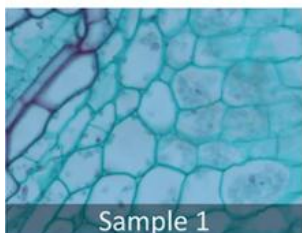

A59.2268 and PCR instrument
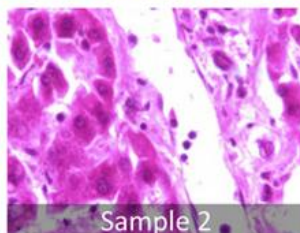

A59.2268 and Cell Counter

A59.2268 and Colony Counter

A59.2268 Camera Intelligent Control Platform(CICP) Captured Sample Images

Sample 1

Sample 2

LCD Screen

Opto-Edu (Beijing) Co., Ltd.

0086 13911110627   sale@optoedu.com   cnoec.com

F-1501 Wanda Plaza, No. 18 Shijingshan Road, Beijing 100043, China