PixMoteur

ABOUT PIXMOTEUR

CAMERA MODULE PROVIDER.

PIXMOTEUR IS SETUP TO DESIGN, PROTOTYPE, MANUFACTURE A BUILD FROM CONCEPT TO FINAL CAMERA MODULE.

Shenzhen Wanshishidai Imaging Technology Co., Ltd. who is a leading technology company specializing in the research and development, customization, and manufacturing of advanced camera modules. With a strong focus on innovation and quality.

We deliver tailored camera solutions that meet the diverse needs of global clients across various industries including consumer electronics, automotive, security, and medical devices.

Our expertise covers the entire lifecycle of camera module production—from concept design and prototyping to mass manufacturing and post-sales support. We pride ourselves on integrating cutting-edge imaging technologies with rigorous quality control processes to ensure every camera module delivers exceptional performance and reliability.
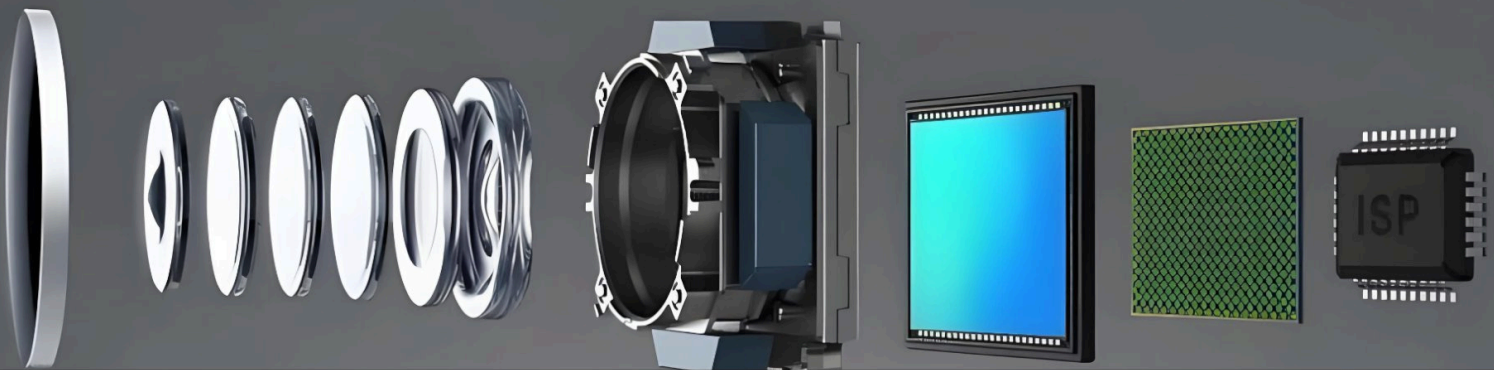
ENDOSCOPE SERIES
CAMERA MODULE
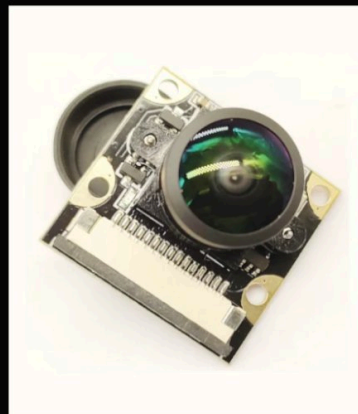
MIPI SERIES
CAMERA MODULE

USB SERIES
CAMERA MODULE

The USB Industrial Endoscope Camera Module is a compact, plug-and-play inspection camera designed for quick, versatile visual checks. Simply connect to your smartphone, tablet or computer (supports OTG-enabled Android devices and mobile adapters for iOS) — no drivers required. Using common mobile camera apps you can capture sharp photos, record video, and stream live footage in real time.
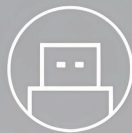
USB-C   **Micro**   **Lightning**   **USB**

USB INDUSTRIAL ENDOSCOPE CAMERA MODULE

Discover the convenience of close-up inspection with the USB Endoscope Camera Module. Engineered for professionals and DIY users alike, this plug-and-play module connects directly to your smartphone or computer to deliver live video, high-quality stills, and recorded footage without complicated setup.

How it works

Plug the module into an OTG-enabled Android phone/tablet or connect to iPhone/iPad using the appropriate adapter; PCs and laptops are supported via USB. Open a compatible camera/inspection app and you'll immediately see live video from the probe. Use the app to capture photos, record video, adjust resolution, and control the onboard LED lights.

Why customers choose it

- Fast setup — no drivers or confusing configuration.
- Clear imagery — focused lens and adjustable LED illumination let you inspect dark, confined spaces.
- Durable and versatile — waterproof tip, corrosion-resistant cable, and flexible shaft for pipes, engines, vents, electronics, and more.
- Portable — lightweight module and compact probe for on-the-go use.

Typical uses

- Plumbing inspection (pipes & drains)
- Automotive maintenance (cylinders, underbody, engine cavities)
- HVAC and ductwork checks
- Electronics and circuit board troubleshooting
- Appliance repair and maintenance
- Home improvement and DIY inspections
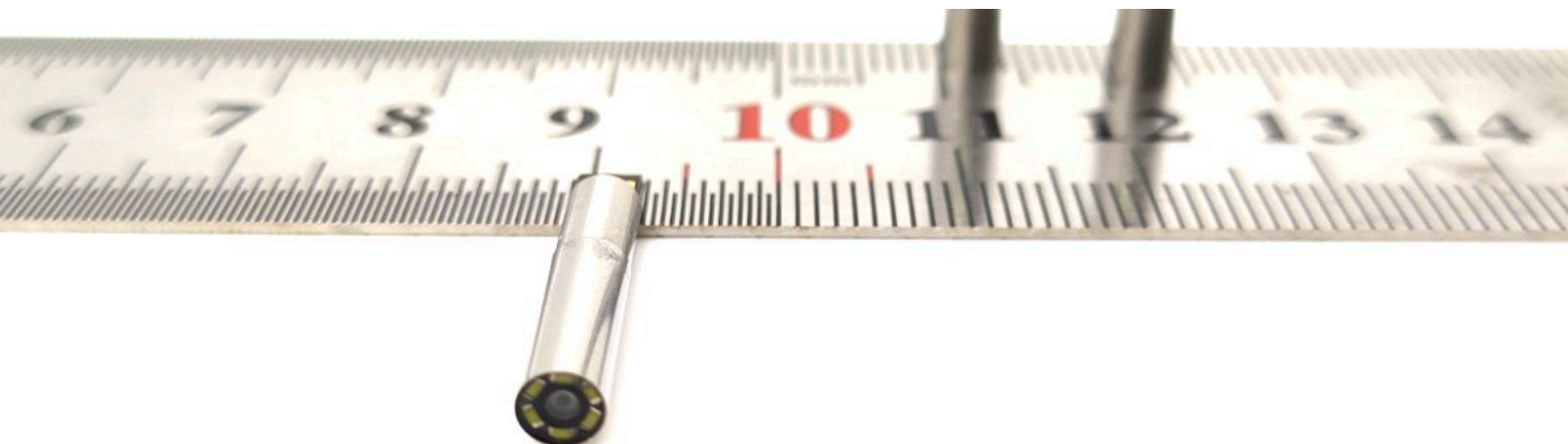
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USB INDUSTRIAL ENDOSCOPE CAMERA MODULE

Key features:

- Plug & play: instant connection with OTG-enabled Android devices and adapters for iPhone/iPad; also compatible with PC.
- Photo & video capture: take high-resolution pictures and record smooth video directly in your mobile app.
- Flexible probe: semi-rigid cable bends to reach tight or curved areas while retaining shape for easy inspection.
- Built-in LEDs: adjustable brightness LEDs around the lens for clear imaging in dark spaces.
- Waterproof tip: IP67-rated probe head for use in wet or humid environments.
- Compact camera module: small-diameter tip for pipeline, engine, appliance, HVAC, automotive and home inspection tasks.
- User-friendly controls: capture, record and toggle lights from your app or inline button (depending on model).

Key Specifications:

- Camera resolution: 0.3MP/ 1MP / 1.3MP / 2MP / 5MP / 8MP
- Probe diameter: 3.9mm / 5.5 mm / 6mm / 8 mm / 12mm / 14mm
- Cable length: 1m / 2m / 5m options, and customization
- Waterproof rating: IP67
- Interface: USB / USB-C / Lightning (with adapter)
- Illumination: 6-8 adjustable white LEDs
- Compatibility: Android (OTG), iOS (with adapter), Windows/Mac (with driver/app)

FIXED FOCUS ENDOSCOPE SERIES SPECIFICATION

Pic				
Product No.	PE-U23910A	PE-U25503A	PE-U25510A	PE-U28003D
Image Sensor	CMOS	CMOS	CMOS	CMOS
Sensor Size	1/9 inch	1/9 inch	1/9 inch	1/6 inch
Focal Length	40 ~80 mm	40 ~60 mm	50 mm~infinity	40 ~80 mm
Field of View	90°	63°	63°	87°
Effective Pixels	1 MP	0.3 MP	1 MP	0.3 MP
Resolution	1280*720	640*480	1280*720	640*480*2
Video Output	USB2.0	USB2.0	USB2.0	USB2.0
Video Output Format	YUV MJPG	VGA	USB2.0	USB2.0
Frame per Second	25FPS	25FPS	25FPS	25FPS
LED	6 PCS White	6 PCS White	6 PCS White	8+1 PCS White
LED Brightness	1200~1400 Lux	1200~1400 Lux	1200~1400 Lux	1200~1400 Lux
Voltage	DC5V 120mA±10mA	DC5V 120mA±10mA	DC5V 120mA±10mA	DC5V 120mA±10mA
Operation Temperature	-20 °C to 70 °C			
Type of Protection	IP 67			
Demensions (mm)	23.8*3.9±0.1	22.5*5.5±0.1	22.5*5.5±0.1	32.5*8.0±0.1

FIXED FOCUS ENDOSCOPE SERIES SPECIFICATION

ENDOSCOPE CAMERA

Pic				
Product No.	PE-U25503B	PE-U28003A	PE-U28010A	PE-U28020A
Image Sensor	CMOS	CMOS	CMOS	CMOS
Sensor Size	1/9 inch	1/6 inch	1/6 inch	1/5 inch
Focal Length	25 ~55 mm	40 ~80 mm	40 ~ 80 mm	35 ~850 mm
Field of View	63°	87°	87°	87°
Effective Pixels	0.3 MP	0.3 MP	1 MP	2 MP
Resolution	640*480	640*480	1280*720	1920*1080
Video Output	USB2.0	USB2.0	USB2.0	USB2.0
Video Output Format	USB2.0	USB2.0	USB2.0	MJPEG YUV
Frame per Second	25FPS	25FPS	25FPS	25FPS
LED	6 PCS White	8 PCS White	8 PCS White	8 PCS White
LED Brightness	1200~1400 Lux	1200~1400 Lux	1200~1400 Lux	1200~1400 Lux
Voltage	DC5V 120mA±10mA	DC5V 120mA±10mA	DC5V 120mA±10mA	DC5V 120mA±10mA
Demensions (mm)	22.94*5.5±0.1	23.78*8.0±0.1	23.0*8.0±0.1	22.8*8.0±0.1

AUTO FOCUS ENDOSCOPE SERIES SPECIFICATION

ENDOSCOPE CAMERA

Pic			
Product No.	PE-U21250B	PE-U21250B	PE-U21480B
Image Sensor	CMOS	CMOS	CMOS
Sensor Size	1/6 inch	1/6 inch	1/6 inch
Focal Length	150 mm~ Infinity	45mm~ Infinity	45mm~ Infinity
Field of View	67°	78°	78°
Effective Pixels	5 MP	5 MP	8 MP
Resolution	2592*1944	2592*1944	3200*2400
Video Output	USB2.0	USB2.0	USB2.0
Video Output Format	USB2.0	USB2.0	USB2.0
Frame per Second	25FPS	25FPS	25FPS
LED	6 PCS White	6 PCS White	6 PCS White
LED Brightness	1200~1400 Lux	1200~1400 Lux	1200~1400 Lux
Voltage	DC 3.6 - 5V 120mA±10mA	DC 3.6 - 5V 120mA±10mA	DC 3.6 - 5V 120mA±10mA
Demensions (mm)	31.0*12±0.1	27.0*14±0.1	27.0*14±0.1

The AV Industrial Endoscope Camera Module is a rugged, plug-and-play analog inspection camera designed for fast, reliable visual checks on-site. With a compact probe head and flexible shaft, it connects directly to any composite-video (RCA/CVBS) monitor, DVR or portable display — no drivers or network setup required. Simply plug the video and power leads into your display and you'll get instant live footage for troubleshooting, maintenance and precision inspection in the field.

Technical highlights

- Video output: Composite Video (CVBS) via RCA connector (NTSC or PAL selectable)
- Camera resolution: analog standard (effective pixel sensor suitable for clear visual inspection)
- Probe diameter: available in 6 mm / 8.5 mm options
- Cable length: 1 m / 2 m / 5 m / custom lengths
- Illumination: 6–8 adjustable white LEDs
- Ingress protection: IP67
- Power: DC 3.6V - 5 V 120mA ± 10 mA with LED

ANALOG VIDEO INDUSTRIAL ENDOSCOPE CAMERA MODULE

Key features

- True plug & play: direct composite (RCA) video output and power lead for immediate connection to AV monitors, DVRs and video recorders — no software or drivers needed.
- Real-time analog video: smooth live feed ideal for inspections where low latency is critical.
- Industrial durability: reinforced semi-rigid cable and robust probe housing designed for workshop and field environments.
- Compact probe head: small-diameter camera tip for access to tight spaces such as engines, pipes, HVAC ducts, and equipment cavities.
- Built-in illumination: adjustable white LEDs around the lens provide clear imaging in low-light or dark environments.
- Waterproof and chemically resistant tip options (model dependent) for use in wet or harsh environments.
- Wide compatibility: works with CCTV monitors, composite-input recorders/DVRs, portable field monitors and many industrial inspection systems.

Why choose this AV model

Analog AV output keeps setup simple and reliable for industrial contexts where low-latency live viewing and durability matter more than network complexity. It's ideal for technicians who need an immediate visual feed on-site without configuring software or networked devices.

Typical applications

- Mechanical and automotive inspections (engine internals, gearboxes)
- Plumbing and pipeline checks
- Industrial equipment maintenance and assembly inspection
- Electrical cabinet and conduit inspection (observe with proper safety precautions)
- Quality control and factory line inspection

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ANALOG VIDEO ENDOSCOPE SERIES SPECIFICATION

| Pic		
Product No.	PE-AV6004A	PE-AV8010A
Image Sensor	CMOS	CMOS
Sensor Size	1/6 inch	1/6 inch
Focal Length	40 mm ~ 70mm	45mm ~ 85mm
Field of View	83°	78°
Effective Pixels	0.45 MP	0.45 MP
Resolution	640*480	640*480
Video Output	CVBS	CVBS
Video Output Format	CVBS	CVBS
Frame per Second	25FPS	25FPS
LED	6 PCS White	8 PCS White
LED Brightness	1200~1400 Lux	1200~1400 Lux
Voltage	DC 3.6 - 5V 120mA±10mA	DC 3.6 - 5V 120mA±10mA
Operation Temperature	-20 °C to 70 °C	
Type of Protection	IP 67	
Demensions (mm)	22.8*6.0±0.1	15.2*8.5±0.1
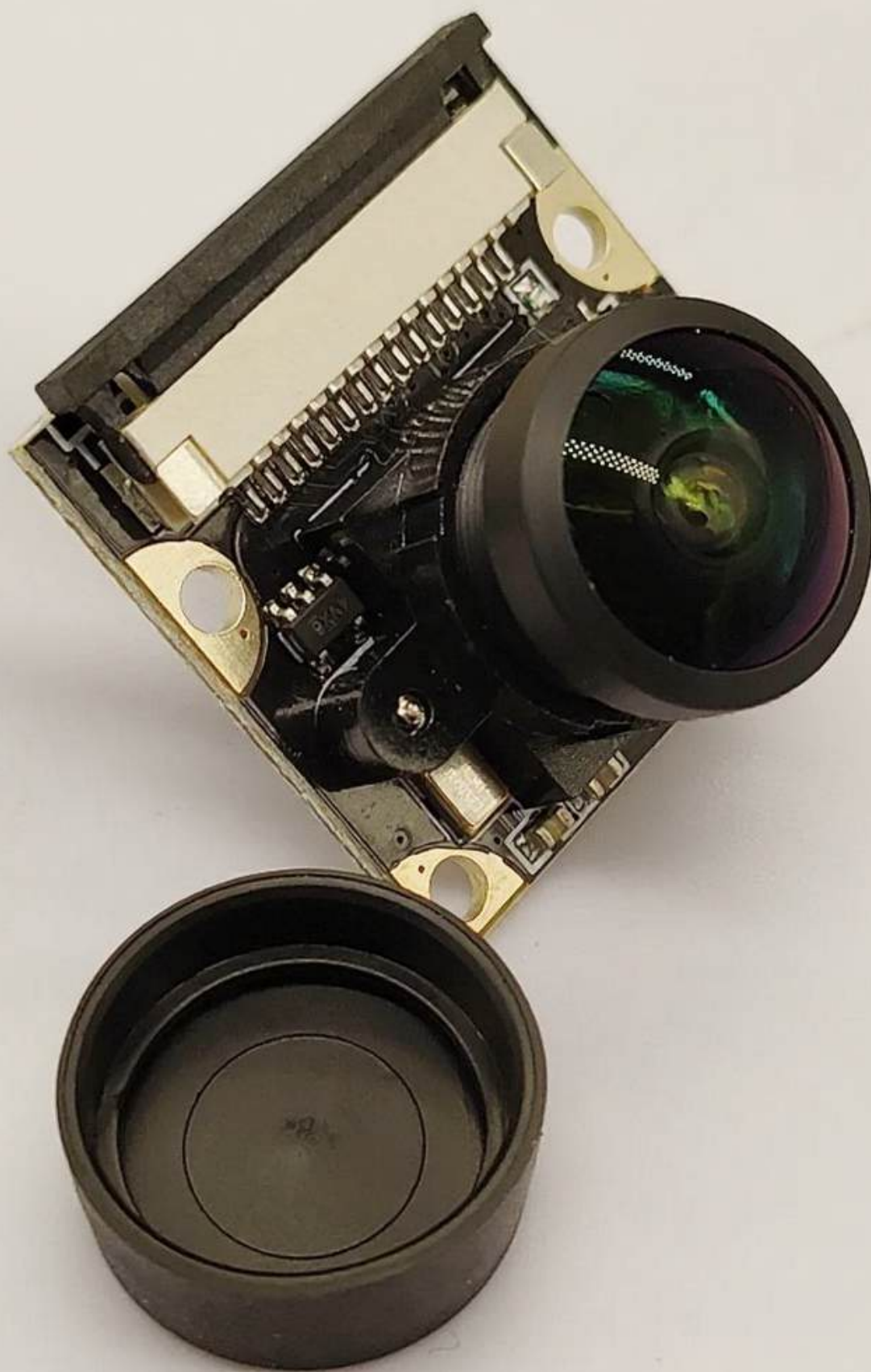
For accurate specs and more products, please contact us.

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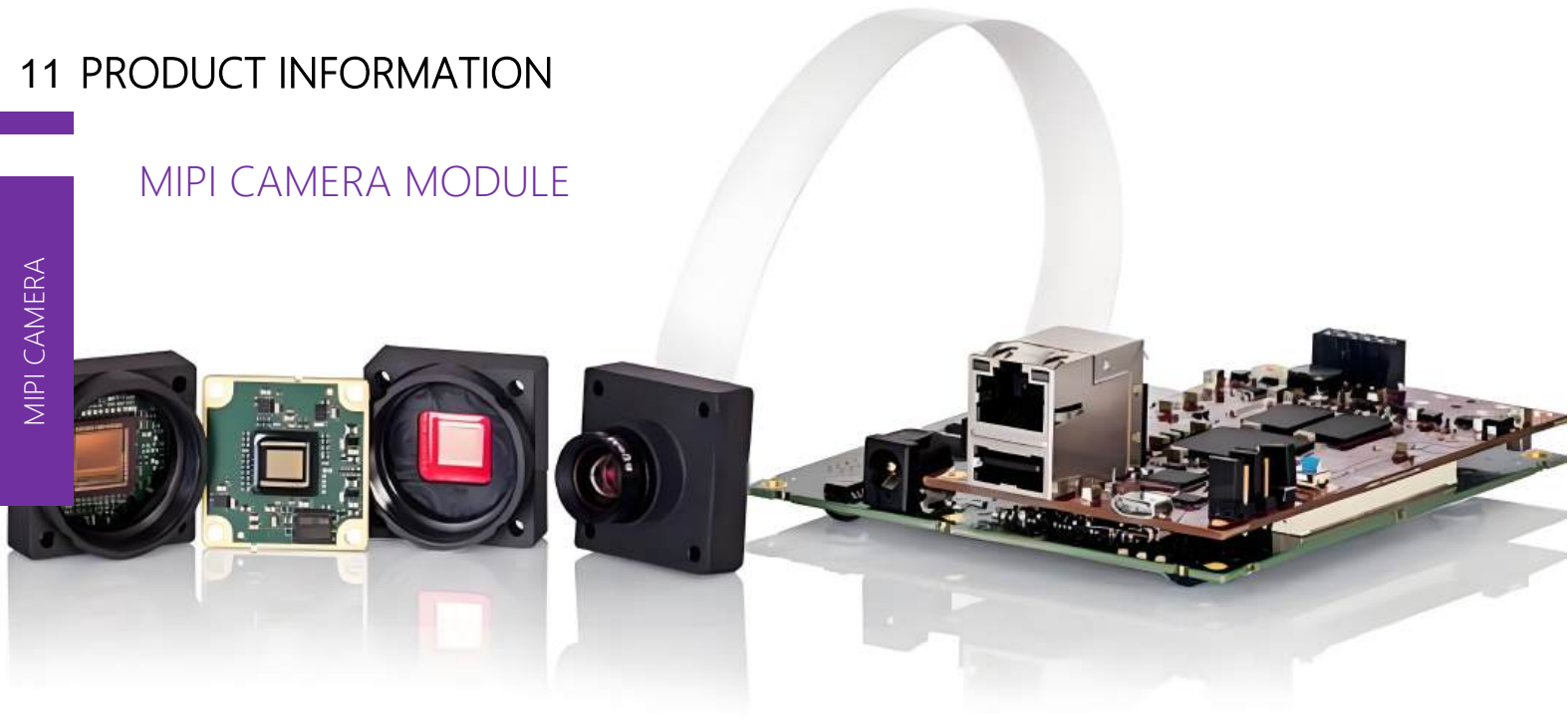
MIPI CAMERA MODULE

The MIPI CSI Camera Module is a compact, board-level imaging solution designed for direct integration with single-board computers and custom carrier boards that expose a MIPI CSI-2 interface. Engineered for low latency and high throughput, the module supports a range of CMOS sensors and lens options to suit applications from computer vision and robotics to embedded AI, surveillance and industrial inspection. Its standard CSI ribbon connector and UVC/driver support (platform dependent) make it an ideal choice for developers and OEMs building vision systems on SBC platforms.

Typical applications

- Embedded computer vision (object detection, tracking, classification)
- Robotics, autonomous vehicles and drones
- AI/edge inference with Jetson and Raspberry Pi
- Surveillance, access control and smart cameras
- Machine vision for quality inspection and automation
- Medical imaging devices and scientific instrumentation
- Prototyping and product development for OEMs

Ordering options

- Sensor and resolution variants, lens mount choices (M12/S-mount/fixed), cable length and connector type, temperature and enclosure options, and custom tuning/ISP calibration services.

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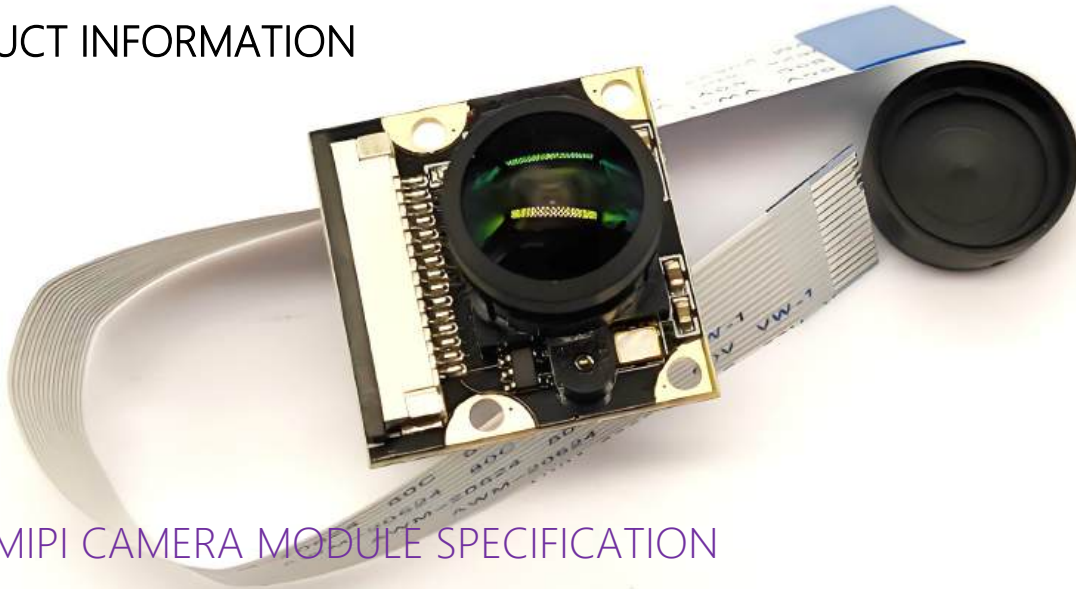
MIPI CAMERA MODULE SPECIFICATION

- Sensor: OmniVision OV5647

- Effective pixels: 5 megapixels

- Static image resolution: 2592 × 1944 pixels

- Field of view (FOV): 65°

- Interface: MIPI CSI

- Connector options: standard 15-pin CSI ribbon

- Lens: fixed-focus (M12 option available on request)

- Shutter: Rolling shutter

- Output formats: RAW/YUV/JPEG

- Frame rates :

    o 2592×1944 (still): up to capture rate supported by host (stills)

    o 1080p (1920×1080): up to 30 fps (may vary by host/driver)

    o 720p (1280×720): higher frame rates possible depending on host CSI lanes and driver

- Photosensitivity / low-light: standard OV5647 performance; supports onboard automatic exposure, auto white balance and gain control

- Dynamic range / image processing: ISP functions depend on host BSP/drivers; manual controls via I2C supported for exposure, gain, white balance

- Power: 3.3 V/1.8 V rails via host CSI power pins

- Mechanical:

    o Camera Module size: 25mm* 24mm*15mm

    o Mounting: standard mounting holes for enclosure integration

    o Lens diameter: typical M12 compatible (if M12 lens option selected)

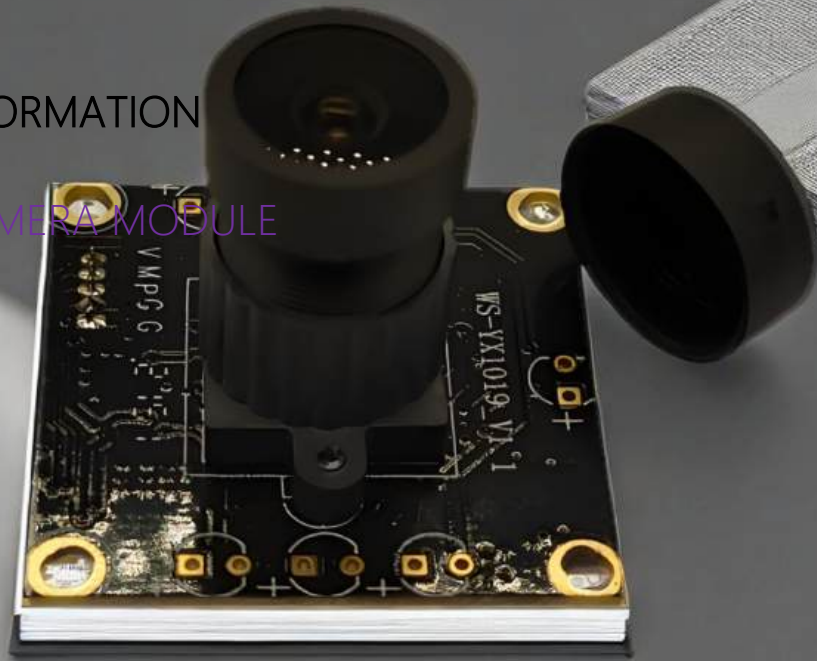- Compliance: RoHS (standard); custom certifications on request
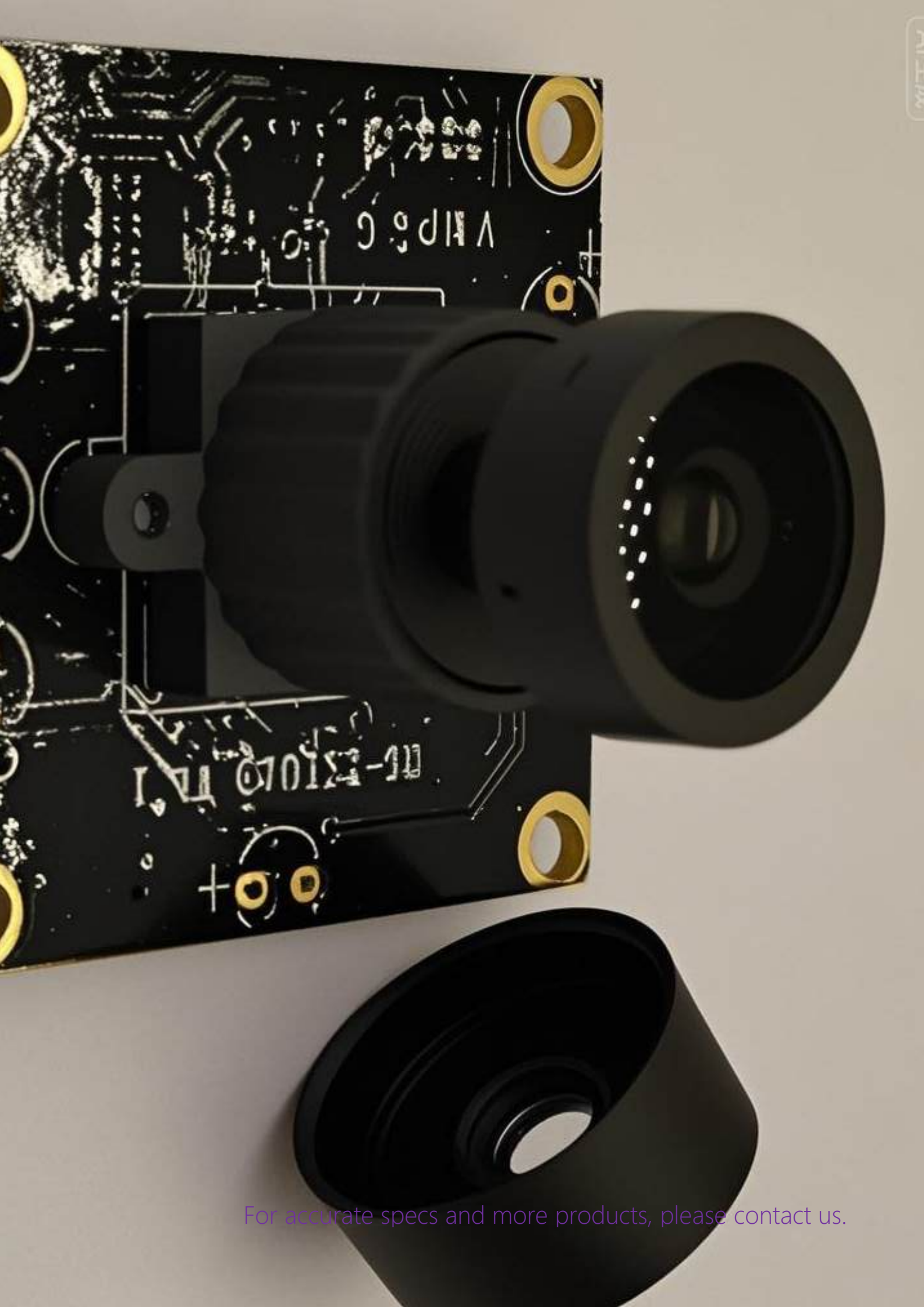
VHP5C

UC-EX1070 L1

USB CAMERA

USB 2.0 CAMERA MODULE

The USB 2.0 Camera Module is a compact, easy-to-integrate imaging solution designed for wide compatibility and cost-effective deployment. With native USB 2.0 interface and standard UVC support, the module provides instant plug-and-play operation with Windows, Linux and most Android devices (OTG). It delivers stable live video, still capture and basic streaming functionality suitable for machine vision entry-level systems, inspection tools, and embedded applications.

Key features & specifications

- Interface: USB 2.0 (UVC compliant)
- Video modes: up to 1080p@30fps (model-dependent) or 720p/30fps for smaller sensors
- Sensor options: 2MP–5MP
- Lens: fixed focal / M12 or custom options
- Low-light support: onboard white LEDs or optional IR illumination
- Power: USB bus-powered (5 V)
- Driver: UVC standard — no proprietary driver required
- Form factor: PCB module or enclosed housing options
- Environmental: operating temperature typical −20°C to +70°C

Typical applications

- General inspection and diagnostics
- Entry-level machine vision and quality control
- OEM integration into kiosks, point-of-sale, and medical devices
- Education, prototyping and development
- Video conferencing / telepresence modules

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USB 3.0 CAMERA MODULE

The USB 3.0 Camera Module provides a high-bandwidth imaging solution for demanding applications that require high resolution, high frame rates and minimal latency. Backward compatible with USB 2.0 hosts (limited), the module uses USB 3.0 with UVC support or vendor SDKs to enable streaming of 2MP–12MP sensors at high frame rates for machine vision, industrial inspection, scientific imaging and advanced embedded systems. Ruggedized options, onboard exposure and gain control, and flexible lens mounts make this module suitable for integration where image quality and throughput are critical.

Key features & specifications

- Interface: USB 3.0 / USB 3.1 Gen1, UVC and SDK support
- Video modes: up to 4K/UHD; common modes include 1080p@60fps, 2MP@120fps, etc.
- Sensor options: 2MP–12MP+ CMOS sensors available
- Lens: C-mount / CS-mount / M12 options for optical flexibility
- Hardware controls: hardware trigger, external sync, ROI, hardware exposure/gain
- Illumination: integrated LED drivers or external illumination control (optional)
- Power: USB bus-powered or external power option for high-performance configurations
- Driver/SDK: UVC for plug-and-play,advanced features and performance tuning supports
- Form factor: board-level, housings, and industrialized enclosures available

Typical applications

- Industrial machine vision and automated inspection
- Robotics, autonomous inspection and guidance systems
- Scientific imaging, microscopy and laboratory equipment
- 3D scanning, metrology and high-speed inspection
- Broadcast, pro AV capture and high-frame-rate streaming
- Medical imaging systems and diagnostic instruments

USB CAMERA

CONTACT US

PixMoteur | Camera Module Provider

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-CAMERA MODULE | CAMERA LENS | CAMERA MODULE PARTS-

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