

# Technical Specification

**IMX323 Micro AHD Camera 15×15mm with 7-inch Monitor DVR Kit, model Number: AC-607**

## Product Overview

The IMX323 Micro AHD Camera with 7-inch Monitor DVR Kit is a complete surveillance package featuring Sony IMX323 sensor for starlight imaging and recording and real-time monitoring in a compact 15\*15mm module. It's designed for portable, high-sensitivity monitoring in US and EU security and industrial sectors.

## Key Features

- Ultra-compact camera: 15\*15mm with Sony IMX323 for superior low-light.
- 2MP resolution (1920x1080@30fps) with WDR and UTC function
- 7-inch monitor DVR for real-time viewing and recording.
- Ultra-low-light sensitivity (0.01Lux) for starlight vision.
- AHD output with up to 500m transmission.
- PAL/NTSC compatibility and multi-channel DVR options.
- Low power consumption (120mA) for portable use.
- Plug-and-play solution

## Typical Applications

- Security field deployments
- Portable industrial inspection
- Vehicle monitoring
- Drone/robot vision system
- Medical applications

**Industrial Automation, Embedded Inspection, Equipment Maintenance, Safety Monitoring**

## Reliability & Compliance

- CE, FCC, RoHS certified
- Passed 48h burn-in test @ 60°C
- Shock & vibration tested

## Custom-made available

(1) AHD Camera Different EFL lens (include its IR filter) and DFOV can be customized (see below)  
other EFL Replaceable m12 lens available as following

A1, pinhole m12 lens

EFL 2.1/2.8/3.7/5/6/7/8/10/15/20/22/25/30/35/45/70mm

A2, Flat normal m12 lens

1.08/1.39/1.44/1.56/1.7/1.8/2.1/2.8/3.6/4/6/8/9.9/12/16/25/50mm

(2) Different wires/cable(BNC/RCA/mini 4pin connector) (see below)

(3) With or without lens holder(board-level PCB ), camera bracket can be custom-made too

• Customizable lenses, interfaces, and monitor upgrades.

- Monitor Upgrade: From 7-inch to 10-inch for enhanced viewing.

- DVR Customization: Up to 4 channels with extended storage.
- Lens Customization: Interchangeable from standard to 150° wide angle.
- Interface Options: Standard AHD coaxial, customizable BNC or mini 4-pin.
- Cable Customization: Lengths up to 500m with rugged shielding

#### Connection diagram between IMX323 AHD camera with mini 4 pin connector



#### Specification of 7inch AHD monitor DVR Model Number: AHD-7DVR

- ◆ CPU: ARK141M
- ◆ 7-inch A-gauge IPS digital screen (parameters):  
Resolution: 1024 (W) \* 3 RGB \* 600 (H),  
Brightness: 500cd/m2,  
Contrast ratio: 350:1,  
Viewing Angle: Left/Right/Up/Down (Full Viewing Angle)
- ◆ Working voltage: DC 12V\_DC 36V
- Power consumption: 6.5W
- ◆ Detachable sun canopy
- ◆ Product function parameter selection operation mode: button or remote control
- ◆ Self-adjustable items in the use of the product:  
There are 11 split modes for brightness, contrast, chromaticity, image inverted/mirrored image, and selectable display
- ◆ Language self-adjustment optional: Chinese, English
- ◆ Power off can remember the display status before shutting down
- ◆ Four video signal inputs (compatible with AHD/CVBS signals)
- ◆ this DVR connect and work with 2pcs or 4pcs Novel mini AHD camera 6\*6mm and 15\*15mm model AC-501 and AC-601 serial, it apply for any standard AHD camera with same interface
- ◆ it can work and support max 128GB SD card.
- ◆ Reversing priority (the machine can come with a reversing ruler line), four trigger lines: V4>V3> V2>V1
- ◆ Bare metal weight: 0.36KG, bare metal size: 12\*18CM, weight including packaging accessories: 0.95KG, 10 sets/box

## Micro AHD Camera 15\*15mm 1080P



<b>Model No.</b>	AC-501-2MP-J
<b>Sensor</b>	SONY IMX323 CMOS 1/2.9" AHD
<b>Resolution</b>	1920*1080P@25FPS, PAL (NTSC is optional)
<b>Output</b>	AHD, RCA / BNC interface
<b>FOV</b>	90°, Pinhole lens, optional
<b>Focus</b>	Manual
<b>White balance</b>	Auto
<b>Microphone</b>	With Microphone
<b>Dimension</b>	Holder: 15*15mm
<b>Length of cable</b>	20cm~2M, standard 0.5M
<b>Power</b>	12V / 50mA, 12V / 90mA
<b>Material</b>	Plastic camera with metal lens
<b>Temperature</b>	-10~+65°C

## Lens options

	Distortionless lens	Wide angle lens	Panoramic lens	Telephoto lens	Pinhole lens	Starlight lens
Appearance						
EFL(mm)	3.6/4/6/8/12/16	2.1/2.5/2.8	1.0/1.56/1.7/1.8	15/20/22/25/30 /35/45/50/70	2.1/2.5/2.8/3.7/4.3/ 5/6/7/8/10/12	2.8/4/6/8/12
FOV	90~30°	160~100°	210~170°	30~3°	140~25°	110~30°

## Interface options

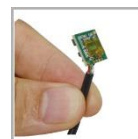


RCA+DC



BNC+DC

## Custom-made



Support custom designed PCB shape and size, camera housing and cable and interface.

Datasheet updated date: 19/08/2025