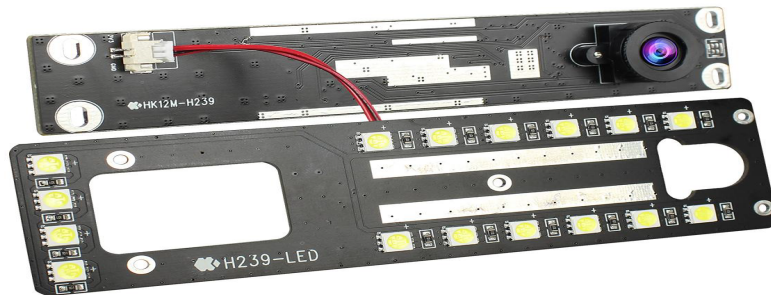# USB 12M HD Camera

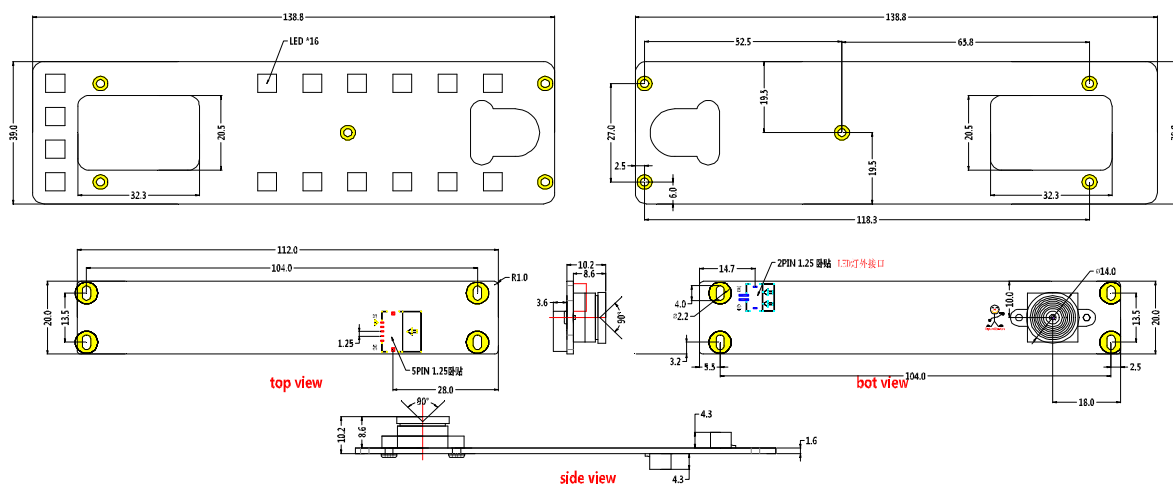## Product Description:

USB 2.0 interface;
12 megapixel resolution HD camera;
With MIC, support recording, video recording;
Can be connected to external light;
Suitable for high camera, witness machine, advertising machine, self-service terminal device,
Android device and other scenes;

CONNECTOR USB 5PIN DESCRIPTIONE

N0.	SYMBOL
1	5V
2	D-
3	D+
4	GND
5	GND

Shenzhen Haokai Industrial Technology Co., LTD

未注公差说明		产品型号：HK12M-H239	3rd ANGLE	
尺寸单位 ： MM		产品料号：	尺寸比例： 1:1	
线性尺寸公差：±0.2		产品类型：	设计 ：	
高度尺寸公差：±0.2		设计日期：	割图 ：	
钻孔尺寸公差：±0.1		版本号 ：	审核 ：	

photosensitive chip	CMOS　1/3.06"
Pixel Size	1.2μm x 1.2μm
SNR max	TBD dB
Max Dynamic range	TBD dB
Minimum illumination	0.1Lux at F12
F/No	2.2
EFL	3.05mm
FOV	90°
IR	650±10nm
Lens Construction	5P+IR
Maximum resolution and frame rate	3840*3104(15fps)、
Other optional resolution ratio	640*480(30fp) 　、 800*600(30fps)、 1024*768(30fps) 、 1280*720(30fps)、 1600*1200(30fps) 、 1920*1080 (30fps)、 2048*1536 (30fps) 、 2592*1944 (30fps)、 3264*2448 (30fps) 、 3840*2160 (30fps)、
Support format	YUV / MJPG
USB power supply voltage	5V±5%
Connect the interface	1*USB-5pin-1.25mm
Interface speed	480mb/s
Operating system request	Windows XP/ VISTA/ Win7/Win8/ Win10/Linux 2.6.24 and　Ubuntu，Mac OS 10.6 and ，Android5.1 and　Above version
Power Consumption	Regular work ：0.9W
storage temperature	0°C to 50°C
working temperature	-10°C to + 60°
structure size	（L ）112mm x（W ）20mm x（H ）10.2mm

Reliability test

Serial number	Test item	Conditions and requirements	Test equipment
1	Low temperature storage	-10℃, 72hours Rising and cooling time 30min respectively	cryostat
2	Low temperature operation	-10℃, 16hours Rising and cooling time 30min respectively	cryostat
3	High temperature storage	50℃, 72hours Rising and cooling time 30min respectively	High-temperature cabinet
4	High-temperature operation	70℃, 16hours Rising and cooling time 30min respectively	High-temperature cabinet
5	High temperature and high humidity storage	50℃, 85%RH, 72hours Rising and cooling time 30min respectively	High temperature and constant humidity box
6	High temperature and high humidity operation	70℃, 85%RH, 16hours Rising and cooling time 30min respectively	High temperature and constant humidity box
7	Thermal shock test	-10℃)→50℃(30min each) The conversion time between high and low temperature is less than 5 minutes Total:10cycles	Low temperature box/high temperature box
8	Free drop test (after packing)	Height 100cm, 10 times	Oak floor
9	Vibration test (after packing)	30Hz, amplitude 2mm,XYz in three directions, vibration 30min	Vibration test stand
10	Electrostatic test	150Pf, 330 OHs 8KV, air discharge measurement 10 times	Electrostatic tester
11	Repeated start switch test10,000 times	The Android APP automatically switches the camera on and off 10,000 times	Android device

Packaging method

Camera → Electrostatic packing box

Electrostatic packing bag

Carton

Label