

Technical Specification

Starvis USB Camera imx385 2MP Model No: UC-535

Product Overview

The Sony IMX385 Starvis Night Vision USB Camera Module is a high-sensitivity imaging solution with ultra-low-light capabilities, designed for demanding security and industrial applications. It features the IMX385 sensor for starves low-light starlight performance in a compact form, ideal for US and EU night-time monitoring.

Key Features & Highlights

- Sony starvis IMX385 sensor for superior night vision (0.001Lux).
- 2MP resolution (1920x1080@30fps) with HDR.
- UVC-compatible USB output for plug-and-play integration.
- Low power consumption (150mA) for extended operation.
- Customizable lenses and interfaces for OEM use.
- Wide dynamic range (120dB) for high-contrast scenes.
- Compact design 32*32mm PCB suitable for embedded systems.
- FCC/CE/RoHS certified for global compliance.

Application Scenarios

- Night-time security: Warehouse surveillance in Chicago.
- Industrial monitoring: Low-light inspection in Detroit factories.
- Drone night flights: Aerial oversight in Des Moines farms.
- Robotics: Vision guidance in dark environments for Boston systems.
- Energy sector: Pipeline monitoring in remote Russian sites

Reliability & Compliance

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

Custom-made available

- (1) Different EFL lens 1/2inch EFL 6mm/8mm/2.8mm wide angle m12 lens optional
- (2) Different wires/cable (include cable type and length)
- (3) With or without lens holder, camera bracket can be custom-made too
- (4) Housing Options: IP67 waterproof or metal enclosures.

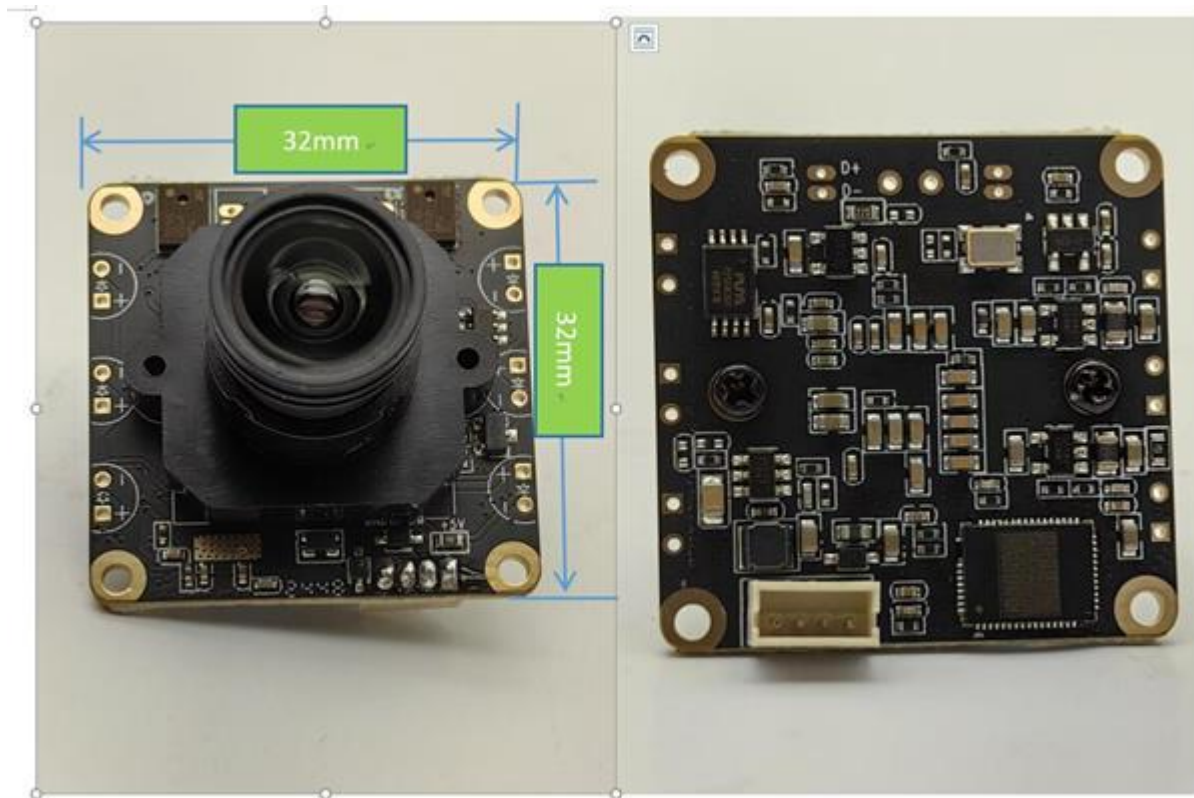
Unique Selling Points vs. Competitors

- Starvis technology provides 10x better low-light than standard CMOS sensors.
- 0.001Lux sensitivity enables true night vision without IR lights, reducing power by 30%.
- UVC plug-and-play is 50% faster to integrate than non-UVC modules.
- HDR (120dB) handles extreme contrast better than 80dB competitors.
- Compact form factor with OEM customization at 20% lower cost for high-sensitivity needs.

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

Sensor Model	Sony STARVIS IMX385
Lens Size	1/2inch
Pixel Size	3.75μm x3.75μm
Maximum effective pixels	FULL HD 1920(H)X1080(V)
Output image format	MJPEG / YUV2 (YUYV)
Supported resolution and frame rate	320X240 QVGA MJPEG 60fps (YUY2 30fps) 640X480 VGA MJPEG 60fps (YUY2 30fps) 800X600 HD 60fps (YUY2 10fps) 960X540 HD 60fps (YUY2 10fps) 1024X768 HD 60fps (YUY2 10fps) 1280X720 HD 60fps (YUY2 10fps) 1280X960 HD 60fps (YUY2 10fps) 1920X1080 FHD 60fps (YUY2 5fps)
Special features	Lens correction/ Defective pixel correction/ Black sun cancellation
Minimum illumination	0.001lux
Shutter type	Electronic rolling shutter / Frame exposure
USB protocol	USB2.0
Interface type	USB2.0 High Speed
On-the-Go (OTG) protocol	USB2.0 OTG
Audio	Support digital audio microphone
Driver-free protocol support	USB Video Class (UVC)
Automatic exposure control AEC	support
Automatic white balance AEB	support
Automatic gain control AGC	support

Adjustable parameters	Brightness, Contrast, Saturation, Hue, Sharpness, Gamma, White Balance, Backlight Contrast, Exposure
M12 lens	Default EFL8mm, F2.0, 1/2
FOV	D68° H55° V30°
Adjustment distance	3meter~
Power supply	USB POWER
Operating voltage	DC5V
Operating current	130mA~150mA
Operating temperature	-20~60°C
Storage temperature	-30~75°C
Cable length	Default 2meter USB cable
Supported systems	WinXP/Vista/Win7/Win8/Win10/Win11 Linux with UVC (above linux-2.6.26) MAC-OS X 10.4.8 or later Wince with UVC Android 4.0 or above with UVC



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Spec updated date: 20.08.2025