

UC-840

4K60 40x zoom camera module

Enhanced Performance

The UC-840 is a 4K camera module with 40x optical zoom. In 1080p mode a total of 80x zoom without a loss of resolution can be achieved. Applications can be found in unmanned aerial vehicles (UAV) and surveillance. The read-out electronic is optimized for an exceptional low latency which is ideal for remote controlled applications.

Hassle Free Integration

The camera is compatible with the industry standard VISCA communication protocol to allow for hassle free upgrading of existing imaging systems. An LVDS interface is available for integration with industry standard embedded computing platforms. Moreover, all interface electronics are integrated in the camera to provide the most common interface standards like HDMI, USB and Ethernet.

Software Programmable

An onboard ARM-based processor is open to the user to integrating DSP functionality in the camera such as object tracking, OSD generation, file management systems and many more.

Features

- Up to 4K (8MP, 3840x2160) resolution at 60 frames per second
- Exceptional Low Latency
- 2x loss-less digital zoom when using 1080p output
- VISCA compatible
- ARM-Core with Linux OS
- Integrated HDMI, USB, Ethernet and LVDS



Specifications

Sensor	Rolling Shutter CMOS, Cell Size = 1.55µm	
Supported resolutions	3840x2160@60/50/30/25; 1920x1080@60/50/30/25; 1280x720@60/50; other resolutions on request	
Optical zoom	40x	
Digital Zoom	4x (default, up to 16x) (2x loss-less in 1080p output modes)	
Focus	Auto, 1-Push, Manual	
F-Number	1.6 (W) to 4.95 (T)	
FOV (Hor)	70° (W), 2.0° (T), 1.0° (T, 2x digital zoom, loss-less for 1080p)	
Latency (HDMI & LVDS)	<1 Frame	
Interfaces	<i>UC-840-HDMI</i>	<i>UC-840-LVDS</i>
	○ HDMI	○ LVDS – 30p
	○ 2xUSB2.0 Host/Device	○ 1xUSB2.0 Host/Device
	○ Ethernet – 1Gb	○ Ethernet – 1Gb
Camera control	VISCA or #SPEED	
Power	6 – 12V DC, 5W	
Dimensions & Weight	50x60x102 mm, appr. 240g (housing included)	
Operating temperature	0°C to 40°C ambient (larger range on request)	
Image processing features	○ Real-Time MJPEG compression, 4K/60 supported	
	○ Real-Time Lens Distortion Correction, 4K/60	
	○ Linux-based ARM-core for onboard processing, open to the developer	