
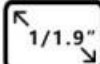










Product Description

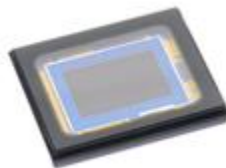


 Sensor IMX385	 1/1.9" 7.3*4.1mm	 Resolution 1936*1096	 ADC 12bit	 QE TBD
 Read Noise 0.7e	 FPS 120	 Full well 18700e	 USB 3.0	 Pixel Size 3.75µm

Camera Sensor

IMX385LQR

Diagonal 8.35 mm (Type 1/2) Approx. 2.13M-Effective Pixel Color CMOS Image Sensor.



CMOS Image Sensor for Industrial Applications that Realizes High Sensitivity Approximately Twice That of the Existing Product

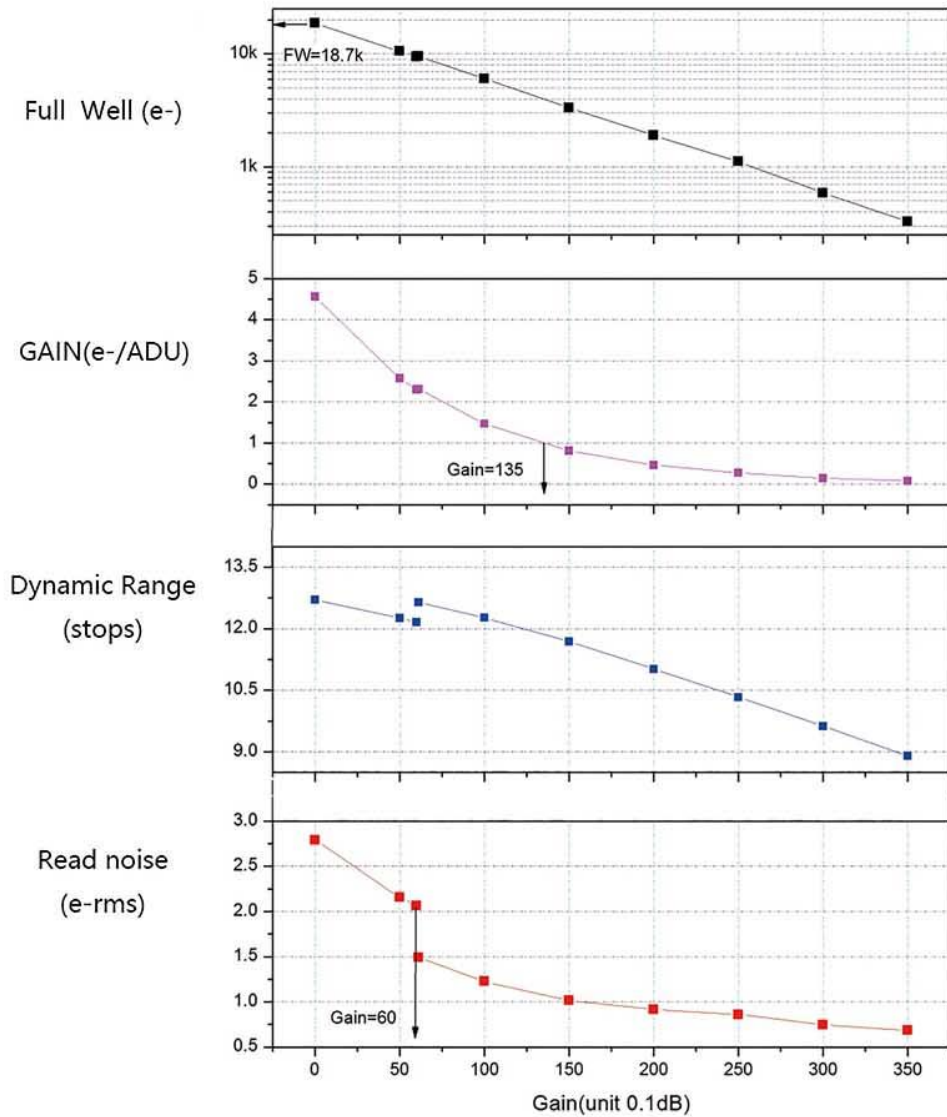
Sony Semiconductor Solutions Corporation has developed the CMOS image sensor "IMX385LQR" for industrial applications. This new image sensor realizes high sensitivity approximately twice that of the existing product (IMX185LQJ)*¹.

The IMX385LQR pursues picture quality at low illuminance most needed by cameras for industrial applications and mounts pixels with a sensitivity of 2350 mV, which is the highest sensitivity among Sony image sensors for industrial applications*². In addition, SNR1s of 0.13 lx*³, which is the highest performance among Sony Full HD-compatible image sensors for industrial applications, is achieved by mounting an internal programmable gain amplifier and high conversion gain pixels. Superior performance as an image sensor for industrial applications is further achieved by combining HDR (High Dynamic Range) technology with technology that improves sensitivity in the near-infrared light region.

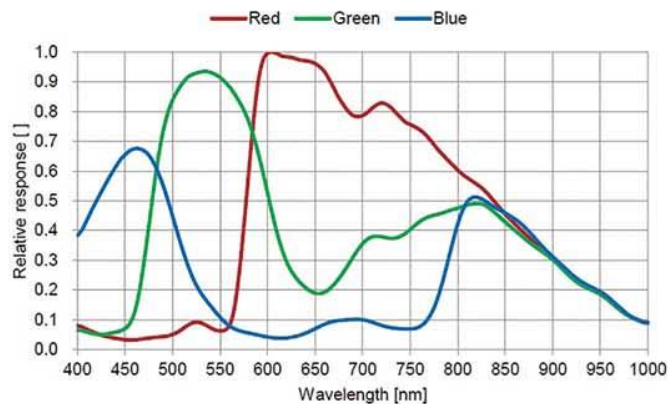
Astrophotography Performance

ASI385MC offers very good performance for astrophotography. Low read noise, high dynamic range, QE peak >80%, AR protective window and much more.

Read noise, full well, gain and dynamic range for ASI385



Relative QE of color cameras



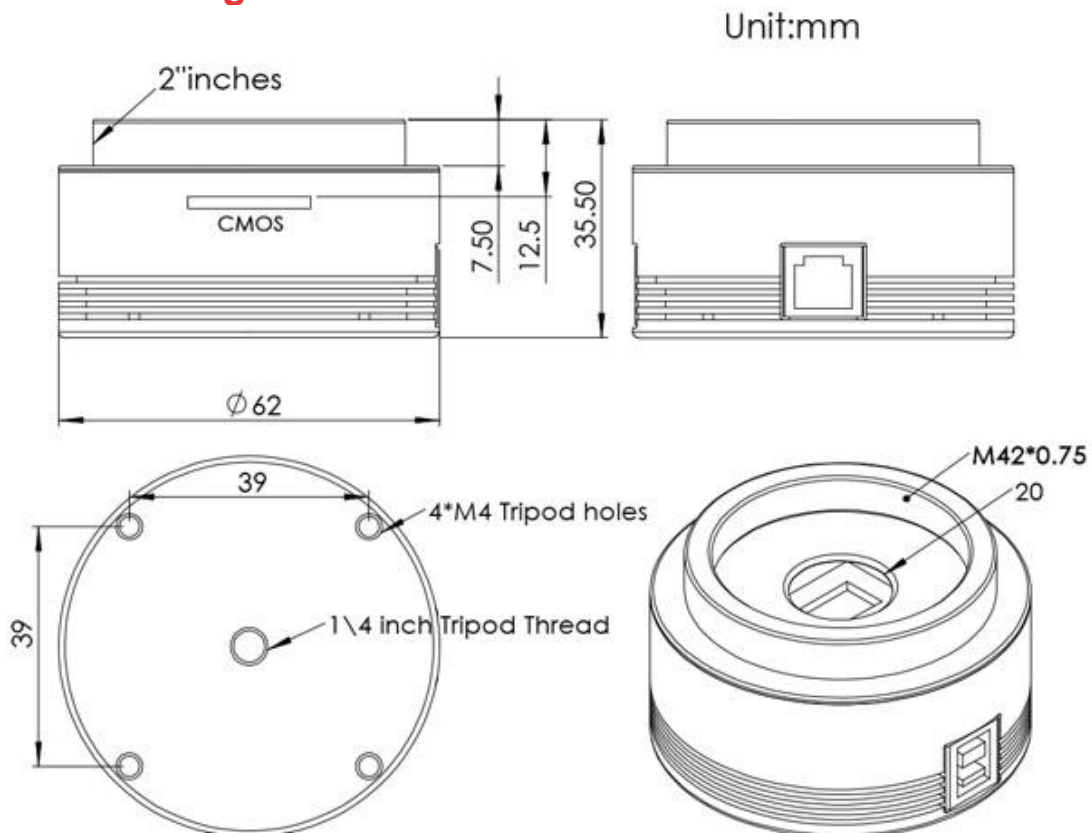
USB 3.0 Port & ST4 Port

USB 3.0 Port: can provide 5Gb bandwidth to let ASI385 run at 67 fps (12bit, normal mode) or 120 fps (10bit, high speed mode) at full resolution(2.13Mega).

ST4 Port: can be used connect with auto guide port of mount, for guiding.



Mechanical Diagram



What is in the box?

ASI385MC box includes all necessary cables, adapters, and manuals.



ST4 cable



camera body



quick guide



2m USB3.0 cable



1.25" cover



1.25" nose piece

Drivers and Softwares:

Our website has newest camera drivers and many DSO and Planetary capture softwares. Please make sure the newest driver and software has been installed before you start shooting:

<https://astronomy-imaging-camera.com/software/>

Sensor: 1/2" CMOS IMX385
Diagonal: 8.35mm
Resolution: 2.12Mega Pixels 1936x1096
Pixel Size: 3.75μm
Exposure Range: 32μs-2000s
ROI: Supported
ST4 Guider Port: Yes
Focus Distance to Sensor: 12.5mm
Shutter Type: Rolling Shutter
Protect window: AR coated window
Operating System Compatibility: Mac, Windows, Linux
Interface: USB3.0/USB2.0
Bit rate: 12bit output(12bit ADC)
Adaptor: 2" / 1.25" / M42X0.75
Dimension: φ62mm X 36mm
Weight: 120g or 4.2 ounces (without lens)
Working Temperature: -5°C—45°C
Storage Temperature: -20°C—60°C
Working Relative Humidity: 20%—80%
Storage Relative Humidity: 20%—95%
Max FPS at full resolution:
10Bit ADC
1936x1096 120fps
12bit ADC
1936x1096 67fps
More resolutions can be user defined