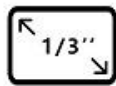


Product Description

ASI120MM-S



Sensor
AR0130CS



1/3"
4.8*3.6mm



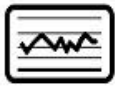
Resolution
1280*960



ADC
12bit



QE
80%



Read Noise
4.0e



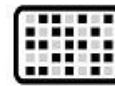
FPS
35



Full well
13000e



USB
2.0



Pixel Size
3.75µm

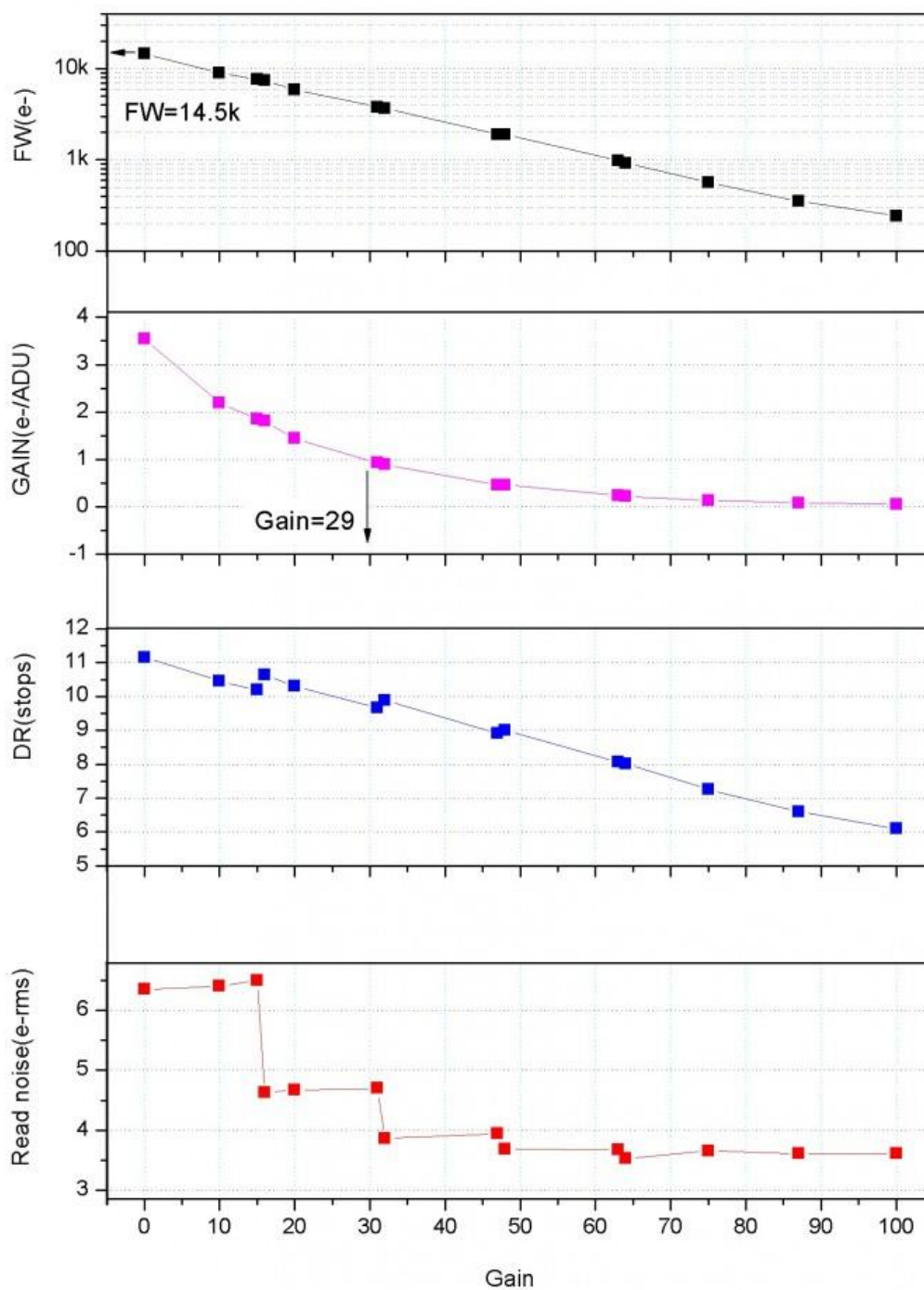
Camera Sensor

ASI120 camera integrates **AR0130CS** 1/3" sensor (4.8 mm x 3.6 mm). This camera has **1280 x 960 pixels**. The pixel size is 3.75 µm x 3.75 µm. This camera provides **12bit** ADC.

Astrophotography Performance

ASI120S is a super speed and sensitive USB3.0 camera. Up to 60FPS under 1280X960 full resolution! With a peak QE almost 80%, beyond ICX618 and with no FPN (Fixed pattern Noise)! Long time exposure supported up to 2000s! Full compatible with USB 2.0 USB Host!

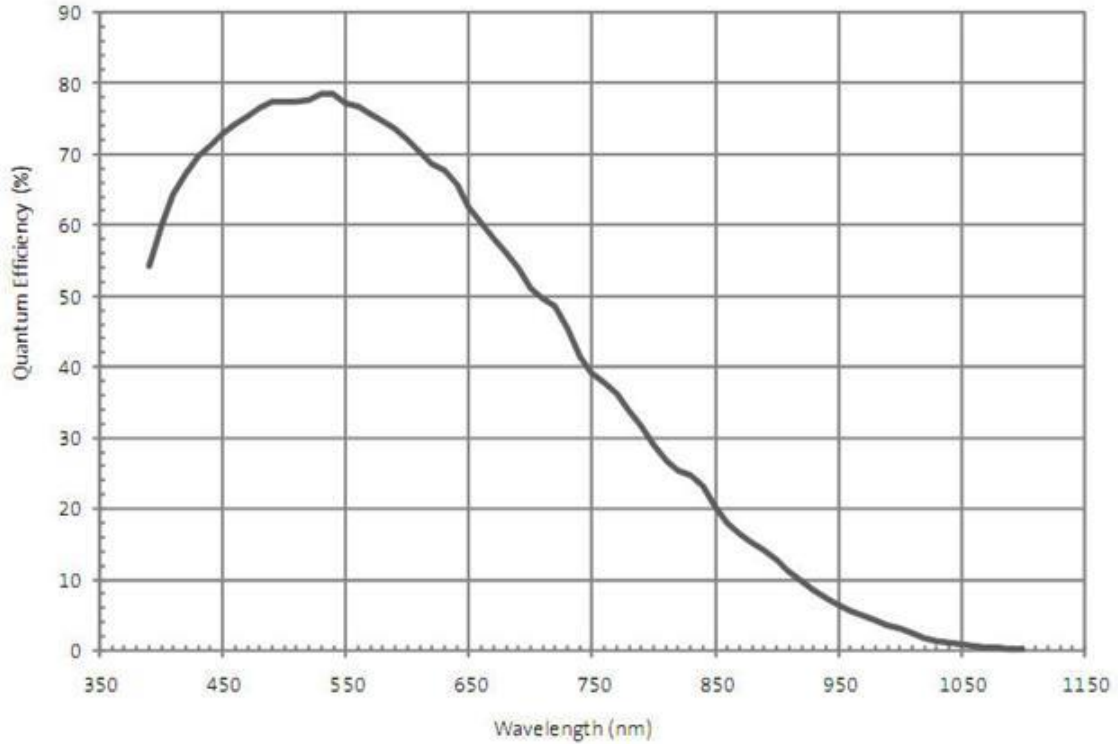
Read noise, full well, gain and dynamic range for ASI120



High QE

Absolute QE Curve, we estimate the Peak Value is almost 80%.

Figure 23: Quantum Efficiency – Monochrome Sensor



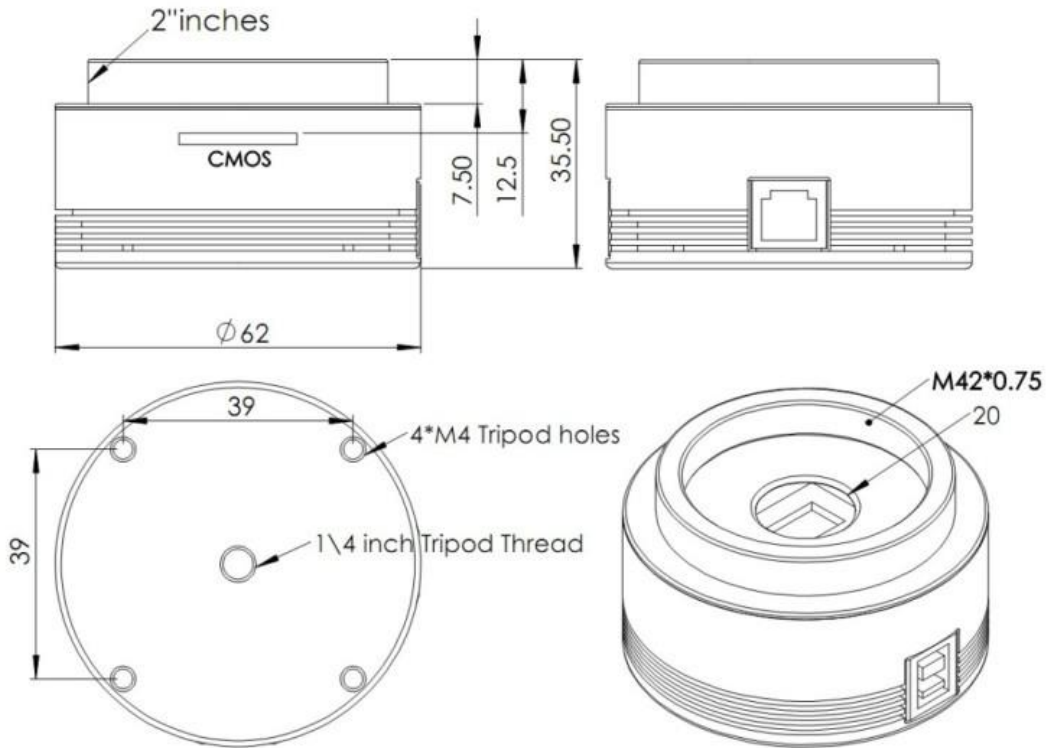
USB 3.0 Port & ST4 Port

USB 3.0 Port: can provide 5Gb bandwidth to let ASI120S run at 60 fps (10bit, high speed mode) at full resolution(1.2Mega).

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

Mechanical Diagram

Unit:mm



What is in the box?



ST4 cable



camera body



quick guide



2m USB3.0 cable



1.25" cover



1.25" nose piece

Camera technical details

Sensor: 1/3" CMOS AR0130CS(Mono)

Resolution: 1.2Mega Pixels 1280x960

Pixel Size: 3.75µm

Exposure Range: 64µs-2000s

ROI: Supported

Interface: USB3.0/USB2.0

Bit rate: 12bit output

Adaptor: 2" / 1.25" / M42X0.75

Dimension: φ62mm X 28mm

Weight: 100g

Working Temperature: -5°C—45°C

Storage Temperature: -20°C—60°C

Working Relative Humidity: 20%—80%

Storage Relative Humidity: 20%—95%

Supported resolution

Binning 1x1:

1280X960@60FPS

1280X720@98FPS

1280X600@116FPS

1280X400@168FPS

960X960@74FPS

1024X768@90FPS

1024X400@160FPS

800X800@85FPS

800X640@106FPS

800X480@141FPS

640X480@133FPS

512X440@145FPS

512X400@158FPS

480X320@196FPS

320X240@254FPS

Binning 2x2:

640X480@45FPS

*Tested under USB3.0 port without overclocking. There is an option to overclock 30% of the current fps