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10am-5:30pm Mon-Fri
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ZWO ASI224MC Colour Astronomy Camera

AUD
\$349.00

Product Images



Short Description

The ASI224MC is highly sensitive, especially in the IR range, and is suitable for astronomy and microscopy photography.

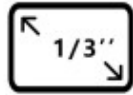
Description

ASI224MC Colour Astronomy Camera

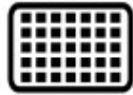




Sensor
IMX224



1/3"
4.9*3.7mm



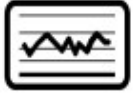
Resolution
1304*976



ADC
12bit



QE
75%-80%



Read Noise
0.8e



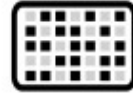
FPS
150



Full well
19200e



USB
3.0



Pixel Size
3.75µm

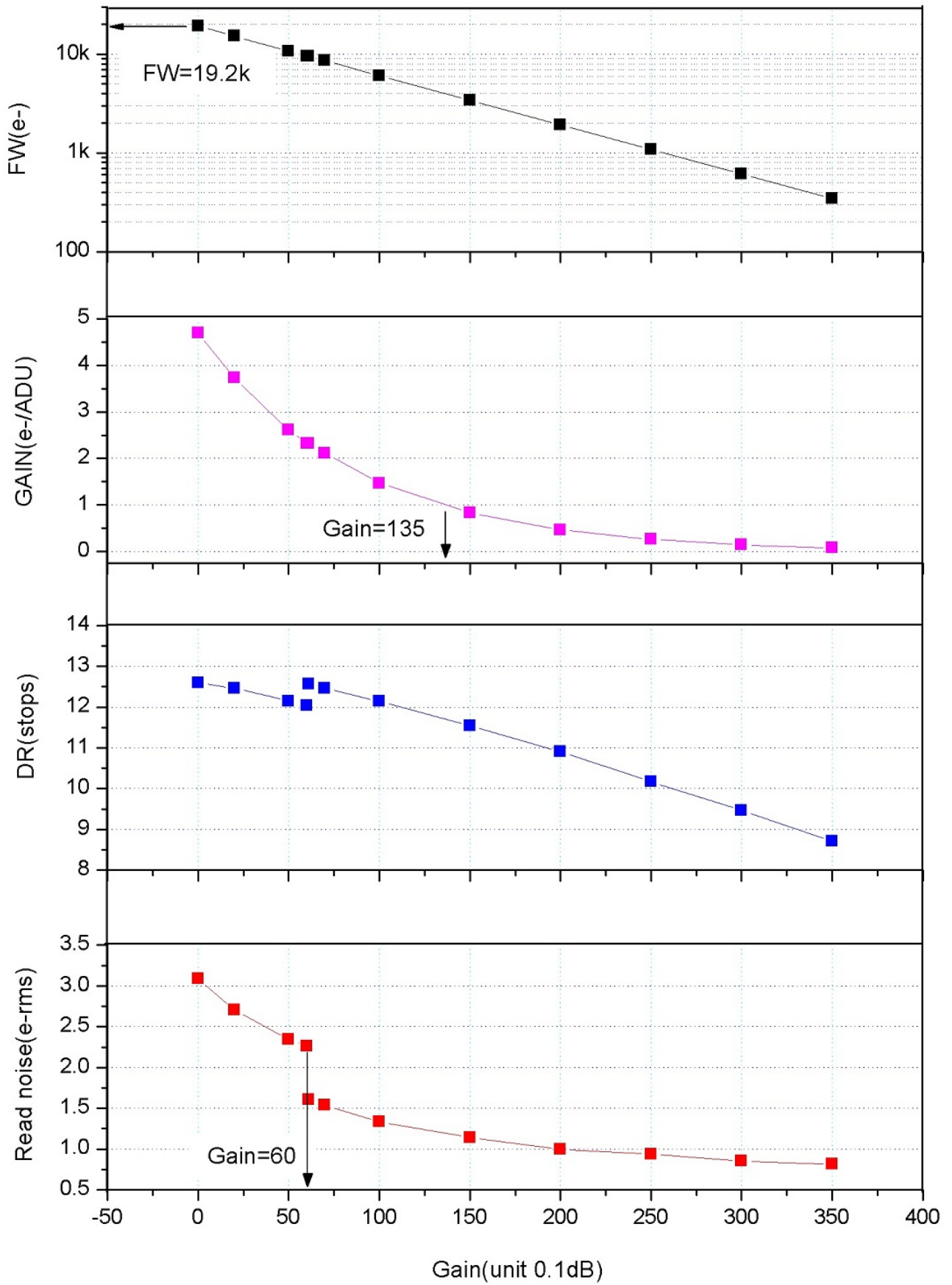
Astrophotography Performance

The ASI224MC has a 1/3" and 1.2M pixel sensor IMX224 with SONY Exmor and NIR Technology. Extremely low read noise (1.5 e) and high sensitivity, especially in IR range.

Highly suitable for planetary and small DSO imaging.

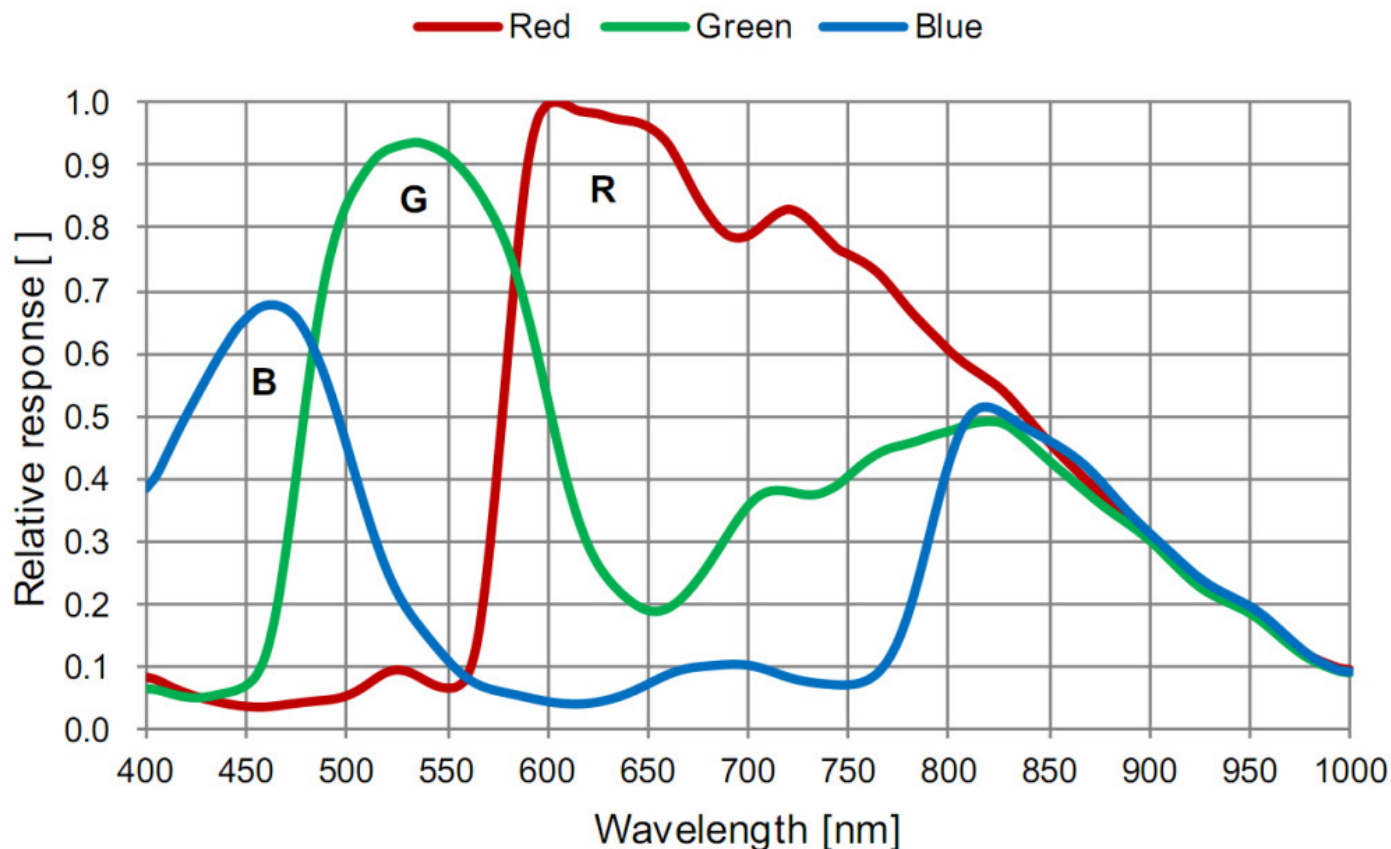
NOTE: In order to to achieve full optical performance during daylight, this camera will require an IR/UV filter. It is recommended to use an IR filter when viewing planets.

Read noise, full well, gain and dynamic range for ASI224



High QE

Relative QE Curve, we estimate the Peak Value should be between 75%-80%.



PCB Version1.3 (anti-amp glow function)

Most sensors will have amp-glow problem, though only if you do longer exposures, such as longer than 1s.

“Amp glow reduction technology” is applied to the ASI224MC and ASI224MC-C cameras. This is a hardware modification to reduce the amp-glow of the sensor. Not every sensor can benefit from this modification, but it is obvious for ASI224MC, so this upgrade is for ASI224MC and ASI224MC-C only.

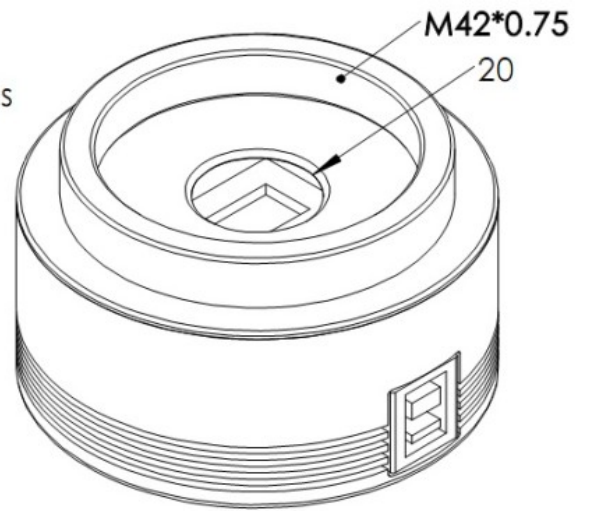
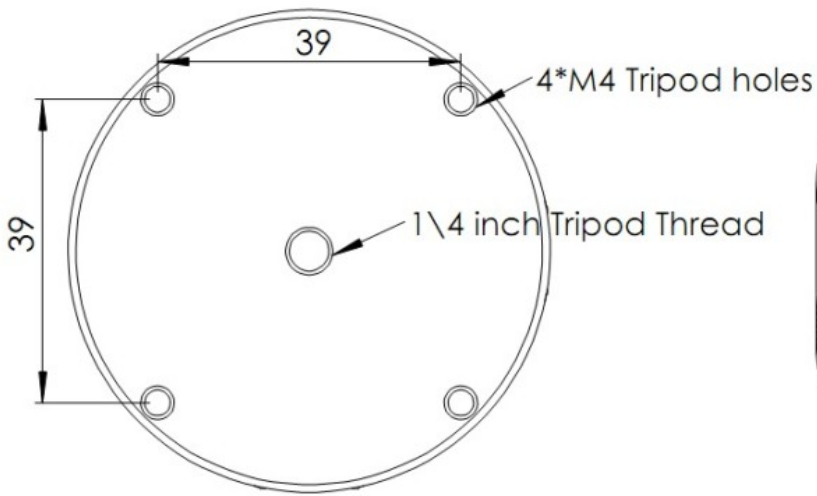
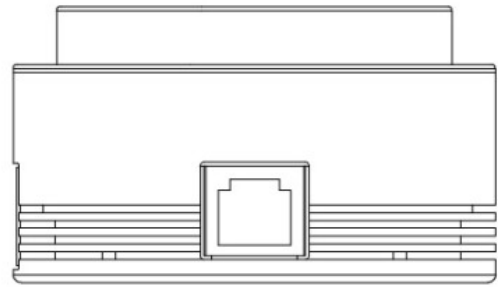
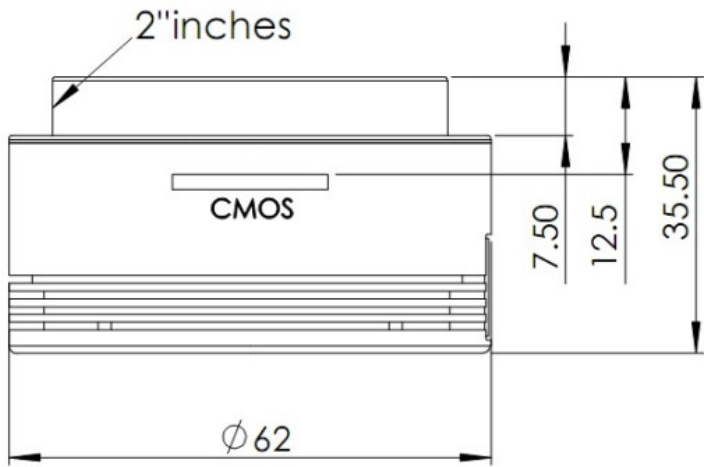
USB 3.0 Port & ST4 Port

USB 3.0 Port: can provide 5 Gb bandwidth to let ASI224 run at 64fps (12bit, normal mode) or 150 fps (10bit, high speed mode) at full resolution (1.2 Mega).

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

Mechanical Drawing

Unit:mm



Specifications

Camera technical details

Sensor: 1/3" CMOS IMX224/IMX225
Resolution: 1.2Mega Pixels 1304X976
Pixel Size: 3.75µm
Sensor Size: 4.8mm*3.6mm
Diagonal: 6.09mm
Exposure Range: 32µs-1000s
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
Dimensions: 78 mm Diameter
Weight: 410g
Back Focus Distance: 17.5mm
Cooling: Regulated Two Stage TEC
Delta T: 35-40 degrees C
Cooler Power Supply Required: 12V at 2A Max

Supported resolution

10bit ADC / 12bit ADC
1304x976 150fps / 64fps
1280x960 152.4fps / 65fps
800x600 241.2fps / 102.9fps
640x480 299.4fps / 127.6fps
320x240 577.9fps / 256.4fps

More resolutions can be user defined