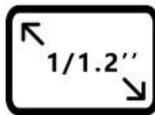


## Product Description

**ASI174MM Mini** camera integrates Sony **IMX174LLJ / IMX174LQJ** 1/1.2" sensor (11.3 mm x 7.1 mm). It is ZWO first mini camera. This camera has **1936 x 1216 pixels**. The pixel size is 5.86  $\mu\text{m}$  x 5.86  $\mu\text{m}$ . This camera provides **12bit** ADC and its **QE peak is 77%**.



Sensor  
IMX174



1/1.2"  
11.3\*7.1mm



Resolution  
1936\*1216



ADC  
12bit



Read Noise  
3.5e



FPS  
18.4



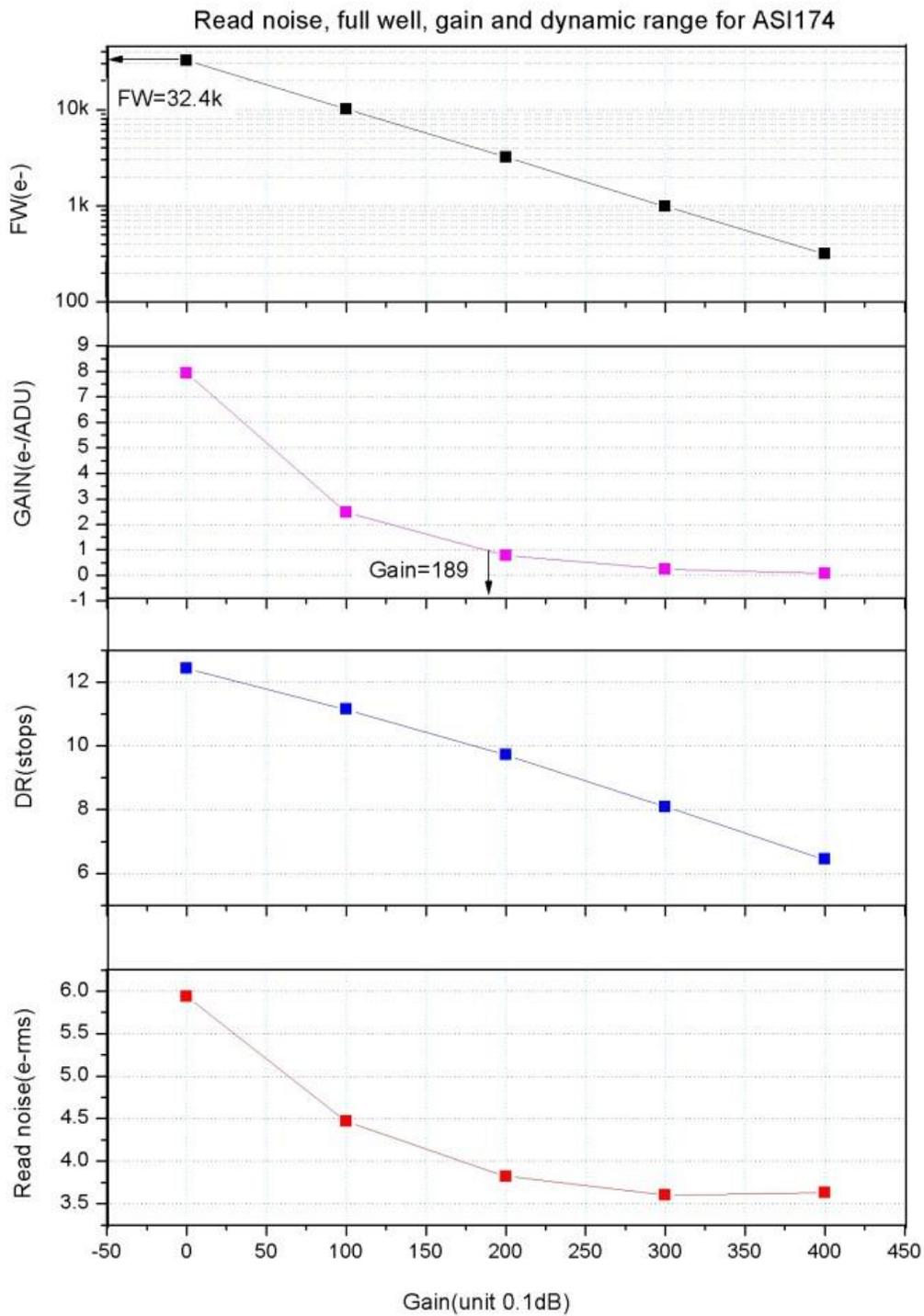
QE  
77%



USB  
2.0

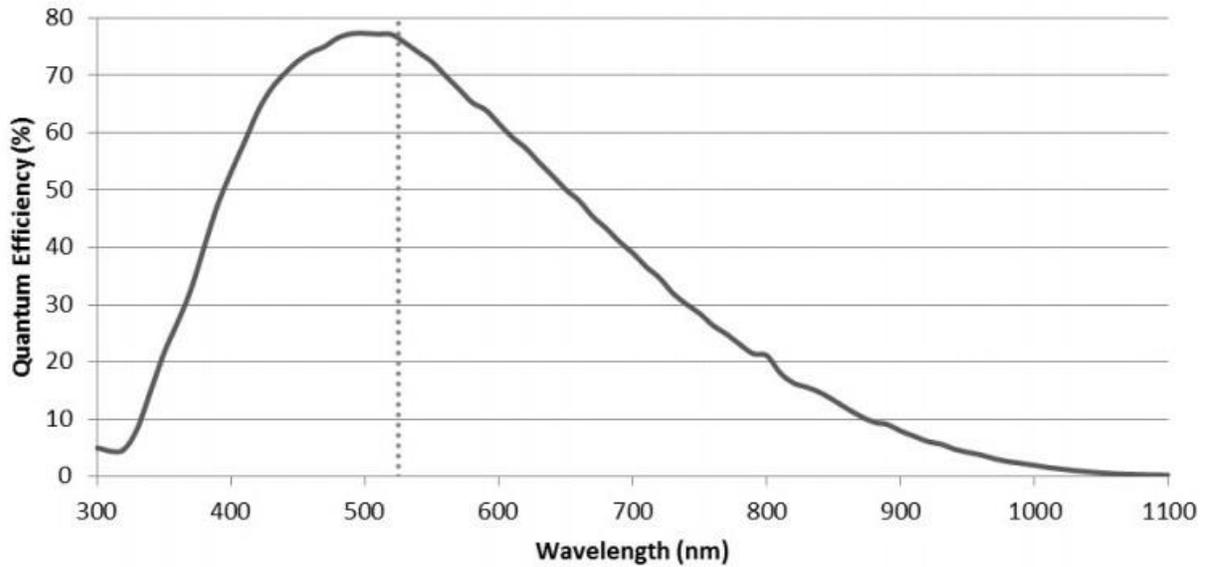
## Astrophotography Performance

ASI174 mini camera offers you very good performance for planetary imaging and guiding. Low read noise, high dynamic range, QE peak 77%, AR protective window and much more.



### High QE

Absolute QE Curve, we estimate the Peak Value is about 77%.



### 174Mini vs. 174MM

Compared with ASI174MM camera, 174mini has smaller outlook, lighter weight, and it can reach focus with eyepiece at the same position.



ASI174MM Mini



ASI174MC/MM

Diameter	36mm	62mm
Weight	60g	140g
Interface type	Type C	Type B
Speed	USB 2.0	USB 3.0

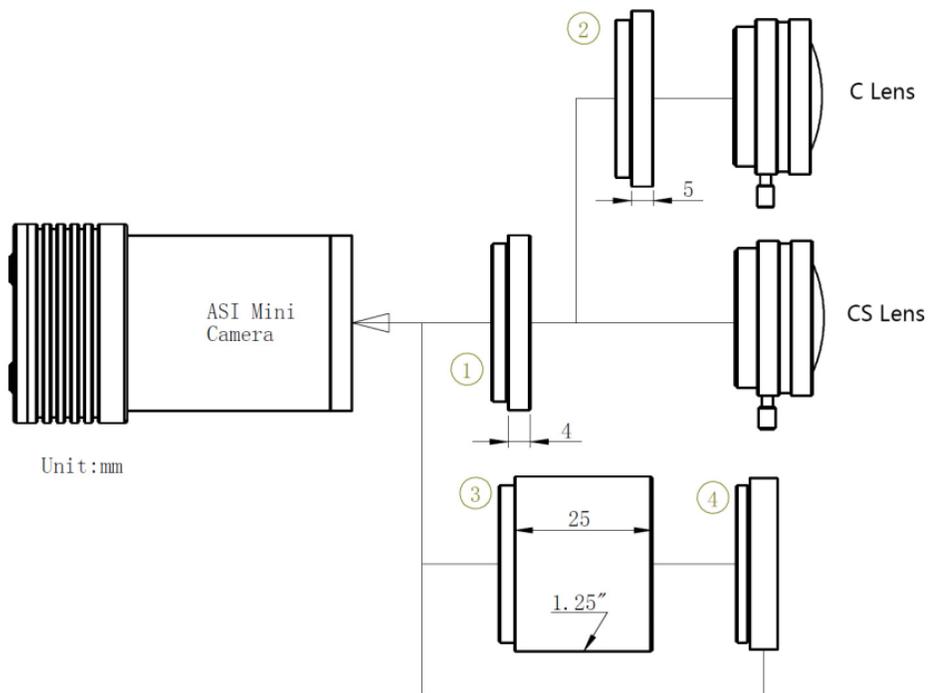
### USB2.0Port & ST4 Port

**USB 2.0 Port:** Mini cameras have one USB2.0 type C port. Type C port is very popular among mobile phones, it doesn't matter with the positive side and negative side of the adapter.

**ST4 Port:** Can connect mini camera directly to the auto guide port of mount.

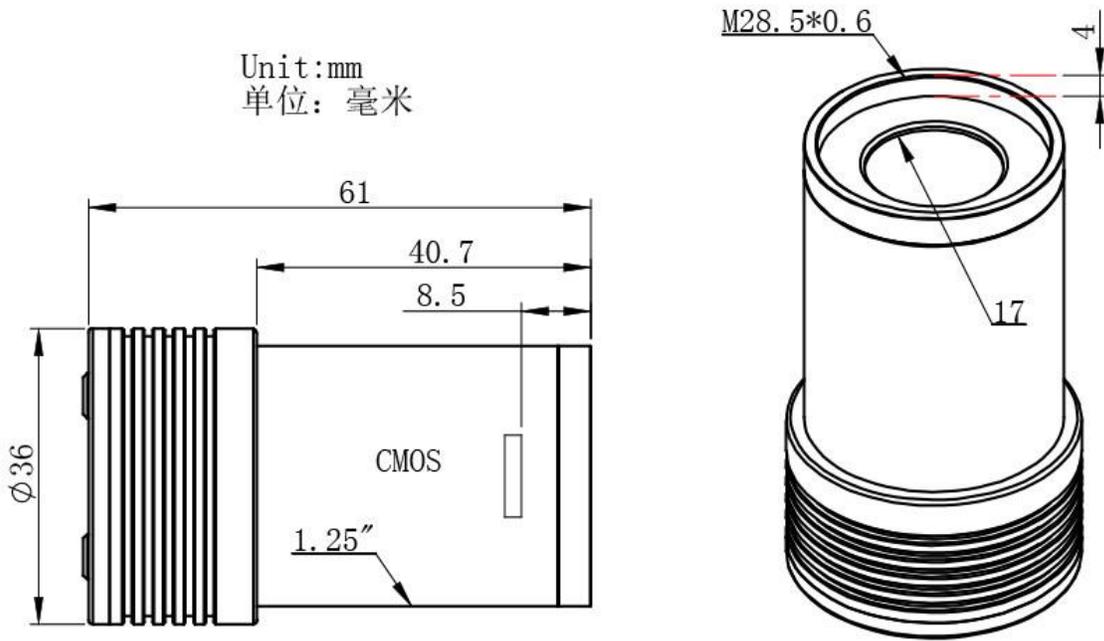


## Connecting Drawing



1. M28.5-CS adapter
2. CS-C adapter
3. 1.25" extender
4. 1.25" filter

## Mechanical Drawing



### What is in the box?

ASI mini camera box includes all necessary cables, adapters, and manual.



### 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/>

## ASI Mini Camera



*ASI174 and ASI290 mini camera have very beautiful outlooks, small size, lighter weight, this is not a big deal.*

*We should consider much more...*

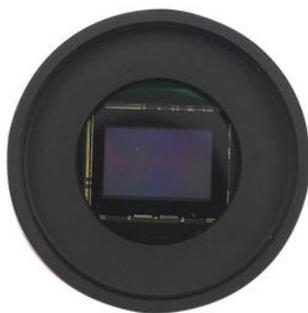
### **How to choose a good guide camera?**

Many people may say: it must be small, suitable for different equipment's (guide scope, OAG), stable working.

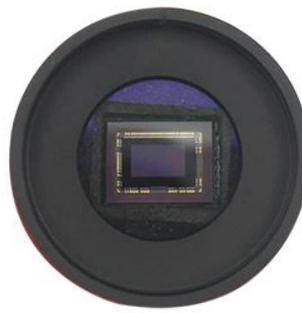
Yes, I think those are basic demand for a good guide camera, and ASI mini camera can do them well.

### **So, what else we do care in the deep of our mind?**

I think there will be three potential requests: **high sensitivity, precisely guiding, big FOV.**



ASI174mini

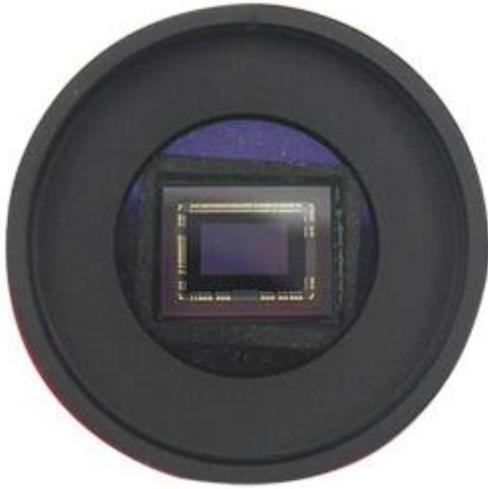


ASI290mini

### **High Sensitivity**

Sensitivity is the first thing we considered. it is very important to look for a guide star. So at the beginning, we were considering to use mono sensor to design our guide camera only. Because mono sensor has much higher sensitivity than color ones. After that, we carefully compared the sensitivity of our sensors. At last, we decide to use 290 and 174 mono sensors. As we know, 290 and 174 mono sensors have about 80% QE peak, can detect more stars in view. Also, we can shorten the exposure time in guiding.

### **Precisely Guiding**



ASI290 mini is designed for precisely guiding. 2.9um pixel size can give you a higher arcsec/pixel than 224 or 120 cameras. Which means in same guide scope, 290mini can detect slighter movement of stars. ASI290 mini can improve about 30% guide precision than 120mm.

## **Big FOV**



ASI174 mini is designed for Big FOV guiding. This is very useful in OAG to looking for a guide star. When you are using OAG guider to work with Ritchey-Chretien or Schmit-Cassegrain telescope, the hardest part is to looking for a guide star. ASI174 mini have 1/1.2" big sensor which means you can have 4 times bigger Fov than 120mm.

## Smiling Face

The back of ASI mini camera is like a smiling face, its mouth is Type C USB port, which is widely used in mobile phones. And its nose is ST4 port, for guiding. Every time, you use mini camera, there will always a smile face stay with you in the dark nights.



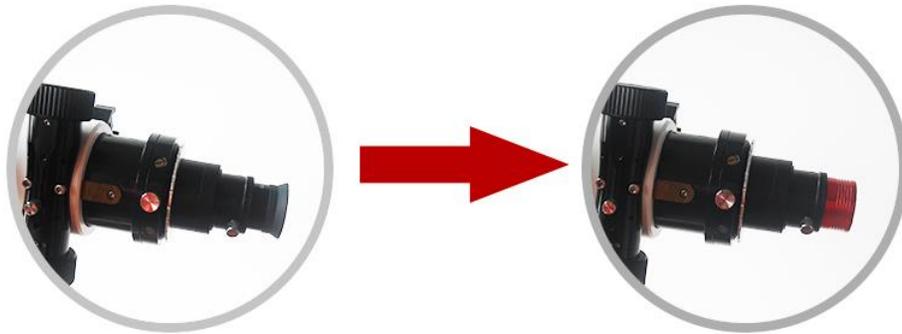
ASI174mini



ASI290mini

## Focus like an eyepiece

ASI mini camera and eyepiece can reach focus at same position. You can focus with an eyepiece and put ASI mini camera into 1.25" holder.



## Work with OAG

Mini camera is very suitable for OAG, it can have much bigger focus range than normal ASI cameras. Never to worry about that guide camera cannot focus with main camera at same time.



**Work with CS adapter and CS lens**



**Work with 1.25" extender**

