



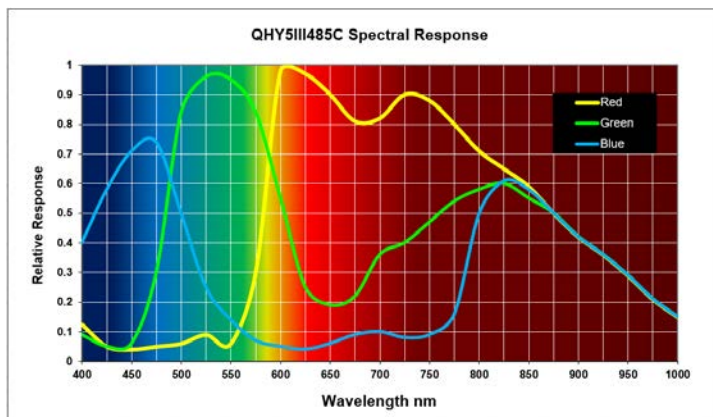
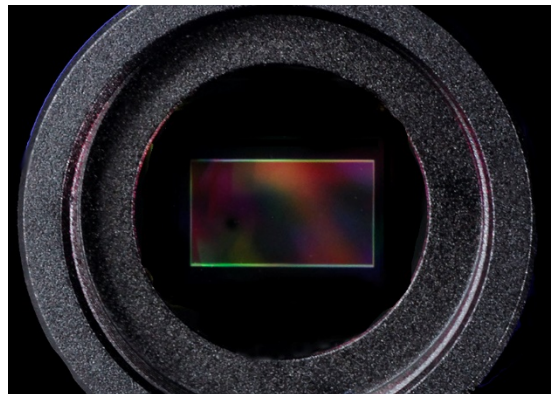
New! **Updated** QHY5III485C Color Planetary And All Sky Camera



QHYCCD is pleased to announce a new addition to its line of high speed, high QE, low noise, planetary cameras, the QHY5III485C. The QHY5III485C uses Sony's new IMX485, back-illuminated, 8.4 megapixel color CMOS sensor with an array of 3864 x 2180 pixels at 2.9um. With USB 3.0 interface, the full frame rate of 44 FPS at 8-bits or 18.5 FPS at 16-bits. Smaller regions of interest will yield even faster frame rates. This new camera makes a great planetary combo with the other newly released QHY5III462C.

Large Sensor Size

The QHY5III485C has 4 times the area of the smaller QHY5III462C and 4 times the number of pixels. In area it is the same size as the popular IMX174 sensor but with back-illumination and higher resolution. The generous field of view provided by this larger sensor makes it ideal for solar and lunar imaging whereas the smaller, faster QHY5III462C with its enhanced IR response is superior for imaging planets like Jupiter, Saturn and Mars.



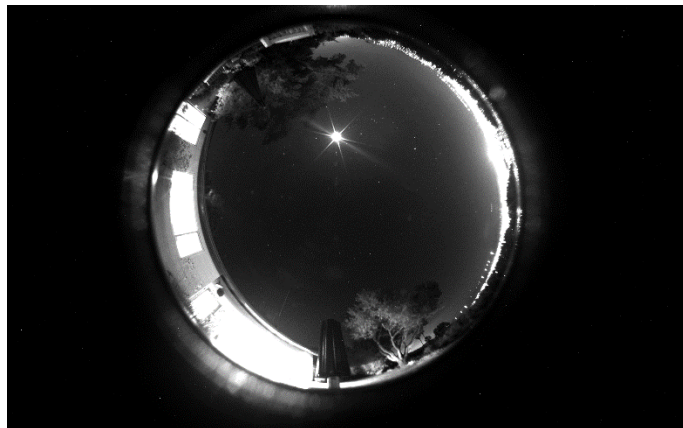
High QE and sHCG

While the QHY5III485C does not have the extended near IR response of the QHY5III462C, it does have sHGC (Super High Gain Conversion) for exceptionally low (less than $1e^-$) read noise. For solar and lunar imaging, the NIR response is not required but the ability to take multiple short exposures in H-alpha light is ideal for solar use and making movies of solar prominences, arcs and eruptions.

Combination All Sky Camera

The QHY5III485C standard package includes a 2.5mm Fisheye lens that converts the planetary camera into a high-resolution, 8.4 Megapixel All Sky camera with 180-degree field of view. The following items are included with the camera:

1. Camera body
2. USB3.0 Cable
3. Tracking Cable
4. Focus Position Locking Ring
5. 2.5mm All Sky Lens
6. C-mount extension ring
7. 1.25" extension tube

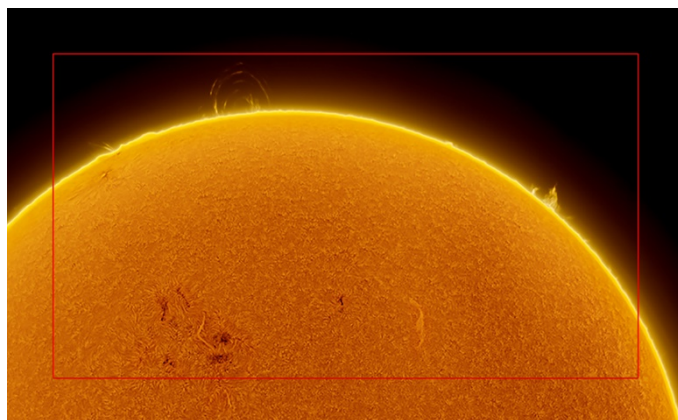


Field of view of the QHY5III485C with 2.5mm Fisheye lens

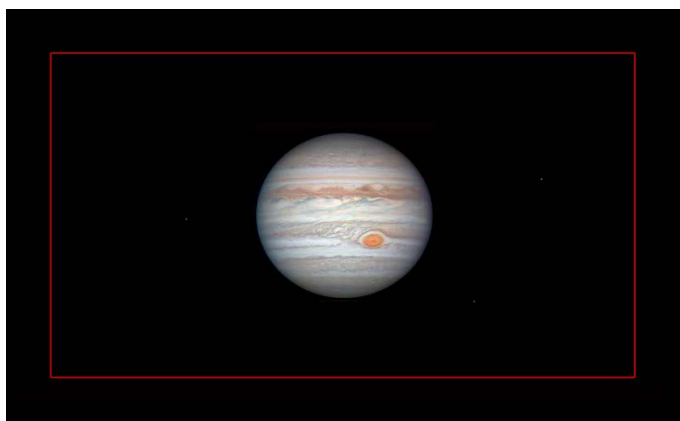
Field of View with QHY5III485C Compared with QHY5III462C



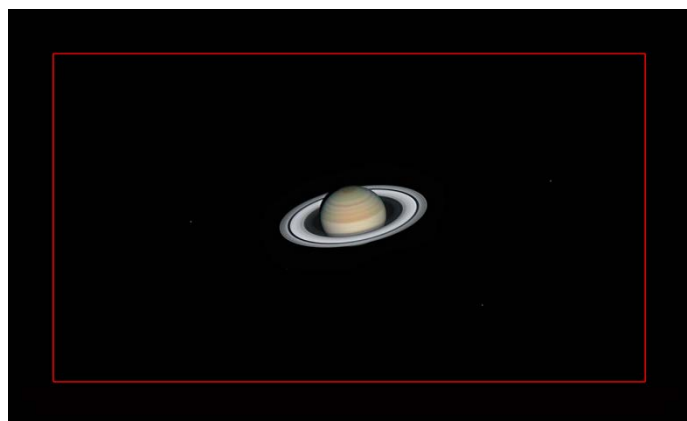
Field of view of **QHY5III485C** camera with 80mm f/7 solar scope



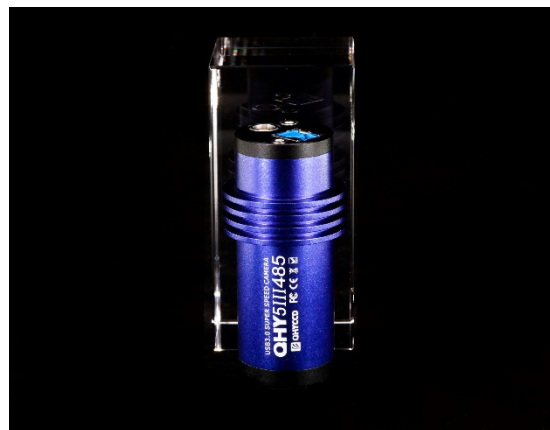
Field of view of **QHY5III485C** camera with C8 telescope



Field of view of **QHY5III462C** camera with C14 and 2X barlow



Field of view of **QHY5III462C** camera with C14 and 2X barlow



Preliminary Specifications

PRELIMINARY QHY5III462C CAMERA SPECIFICATIONS	
Model	QHY5III485C
CMOS Sensor	SONY IMX485 CMOS
Pixel Size	2.9um x 2.9um
Effective Pixel Area	3864 x 2180
Effective Pixels	8.4 Megapixels
Full Well	12,236e-
Readout Noise	1.0e- to 2.4e- Standard Mode, 0.6e- to 1.09e- sHGC Mode
AD Sample Depth	8-bit/12-bit (output as 8-bit and 16-bit)
Sensor Size	Typical 1/1.2 inch
Full Frame Rate	Full Resolution 44 FPS@8-bits, 18.5 FPS @ 16-bits (USB3.0 Port)
ROI Frame Rate	78.5FPS @1200 lines, 87 FPS @ 1080 lines, 91.5 FPS @ 1024 lines, 97.5 FPS @ 960 lines, 121 FPS @ 768 lines, 190 FPS @ 480 lines
Exposure Time Range	10us - 300sec
Shutter Type	Electronic Rolling Shutter
Computer Interface	USB3.0
Guide Port	Yes
Telescope Interface	1.25-inch with CS mount threads (C-mount adapter included)
Optical Window	UV/IR cut and AR coated

