



NEW PRODUCT ANNOUNCEMENT

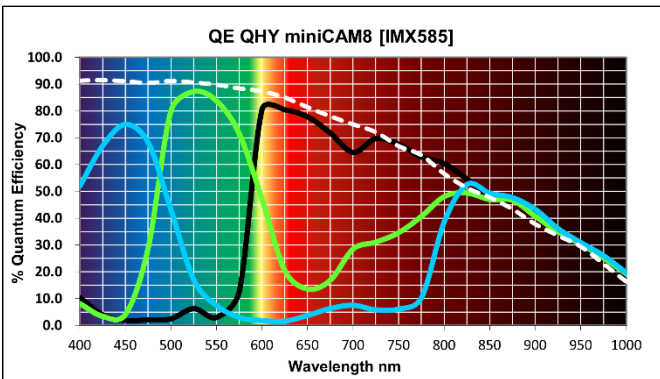
QHY miniCAM8

**Compact High-Performance Camera
Built-in 8 Position Filter Wheel
8 Megapixel, TE Cooled -45C Delta
STARVIS 2 Back-Illuminated CMOS
High Visual and NIR Sensitivity**



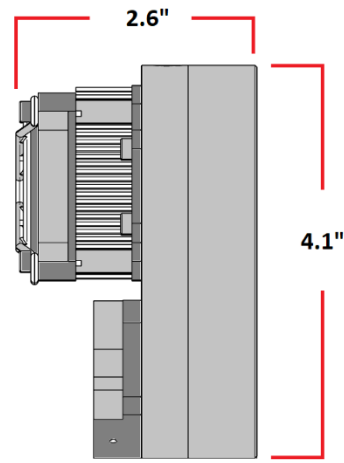
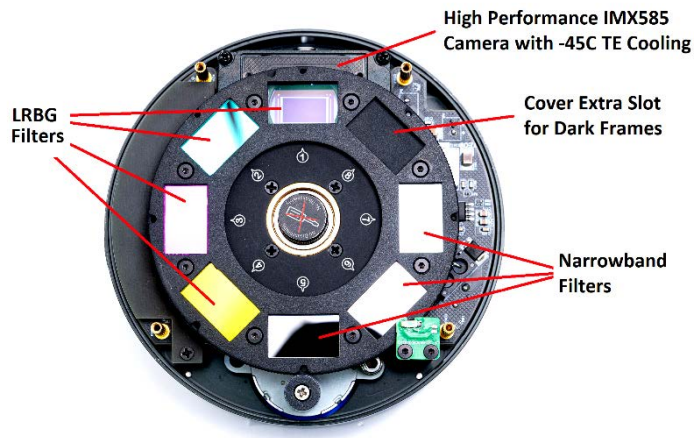
- Sony IMX585 CMOS Sensor
- 8 Megapixels @ 2.9u
- Built-in 8-Position Filter Wheel
- Ultra-Low 0.76 e- Read Noise
- Generous 54ke- Full Well
- High Dynamic Range, 8X Conventional Sensors
- Back-Illuminated Sensor, > 90% QE
- Zero Amplifier Glow

At just over 4 inches in diameter and a few inches thick, the new miniCAM8 is a compact, high resolution, high performance, cooled imaging system capable of exceptional, high quality deep space images as well as high quality, high resolution planetary images.



So often, compactness in astroimaging is achieved at the expense of some other critical feature found in multi-component cooled systems, such as sensor quality or thermoelectric cooling, etc. Such is not the case with the new miniCAM8. Based on Sony's IMX585 8 MP sensor, the miniCAM8 includes full TE cooling capable of reaching a delta of -45C from ambient along with a built-in 8-position filter wheel for complete LRGB and narrowband imaging.

PRELIMINARY SPECIFICATIONS	
Product Model	miniCAM8
Sensor	Sony IMX585
Version	Mono & Color
Front / Back Illuminated	BSI
Sensor Size	1/1.2inch
Pixel Size	2.9um x 2.9um
Resolution	3856 x 2180
Effective Pixel Count	8 MP
Full Well	54ke-
Readout Noise	0.76 - 7.8e-
A/D [Linear HDR Mode]	2 x 12-bits combined to 16-bits
Full Resolution Frame Rate	41.5FPS@8bit 23.5FPS @16bit
ROI Frame Rate	Same as Full Resolution
Exposure	11us-900sec
Shutter Type	Electronic rolling shutter
Built-in Buffer	512MB DDR3
Data Interface	USB 3.0
Telescope Interface	1.25 INCH
Optical Glass Window	AR+AR Coated
Filter Wheel	Built-in 8-Position Carousel
Filter size	19 x 12 x 1.1mm
Back Focus	17.5mm
Cooling System	Dual-Stage Thermoelectric Cooling
Cooling Temperature	Maximum Cooling Delta -45°C
Weight	480g
Dimensions	Approx. 4.4 inches diameter
miniCAM8M	\$599 (No filters)
miniCAM8M Deep sky combo	\$799 (LRGB + Ha, SII, OIII filters)
miniCAM8C Deep sky combo	\$699 (Multi-band filter set for color sensor)



Conventional Sensor



IMX585

The IMX585 is a 1/1.2" sensor with 8 million pixels (3840 x 2160 resolution), widely used in high-performance cooled cameras, especially in the fields of astronomical observation and low-light imaging. The monochrome version removes the Bayer filter, significantly enhancing sensitivity, making it ideal for astrophotography, scientific imaging, and photometry applications.

Generally, in order to provide HDR (high dynamic range) imaging, multi-exposure image capture is required, and the multiple images recorded at differing exposure times are composited into a single shot. This results in issues with artifacts. The latest sensor design adopts Sony's new proprietary "STARVIS 2" technology, which delivers both high sensitivity and HDR imaging. It allows for imaging in a single exposure, which suppresses the occurrence of artifacts, delivering 88 dB HDR, approximately 8 times that of a conventional sensor without increasing the pixel size. It also increases the sensitivity in the near infrared range by approximately 1.7 times compared to a conventional sensor.

Included Items	Mono	Color
Adapter Ring	1.25-Inch Extension Ring	1.25-Inch Extension Ring
Power Adapter	12V 5A Power Adapter	12V 5A Power Adapter
Power Cable	National Standard / American Standard / European Standard / British Standard	National Standard / American Standard / European Standard / British Standard
Self-Locking Power Cable	12V Self-Locking Power Cable	12V Self-Locking Power Cable
USB cable	1.8 Meter 3.0 USB Cable	1.8 Meter 3.0 USB Cable
Lens Mounting Clamp	Silicone Material Clamp filter	Silicone Material Clamp filter
Screwdriver	For Installing Filters	For Installing Filters
Desiccant Tube	For drying CMOS Chamber	For Drying CMOS Chamber
Camera Packaging Bag	Drawstring Velvet Carrying	Drawstring Velvet Carrying Bag
Box	White Packaging Box	White Packaging Box
	Mono Combo Filters	Color Combo Filters
	7nm SII (19*12*1.1)	Light Pollution Filter (LPF)
	7nm Ha (19*12*1.1)	Heavy Light Pollution Filter (HLP)
	7nm OIII (19*12*1.1)	4-Chanel Enhancement Filter (FCE)
	Luminance (19*12*1.1)	UV/IR Cut
	Red (19*12*1.1)	
	Green (19*12*1.1)	
	Blue (19*12*1.1)	