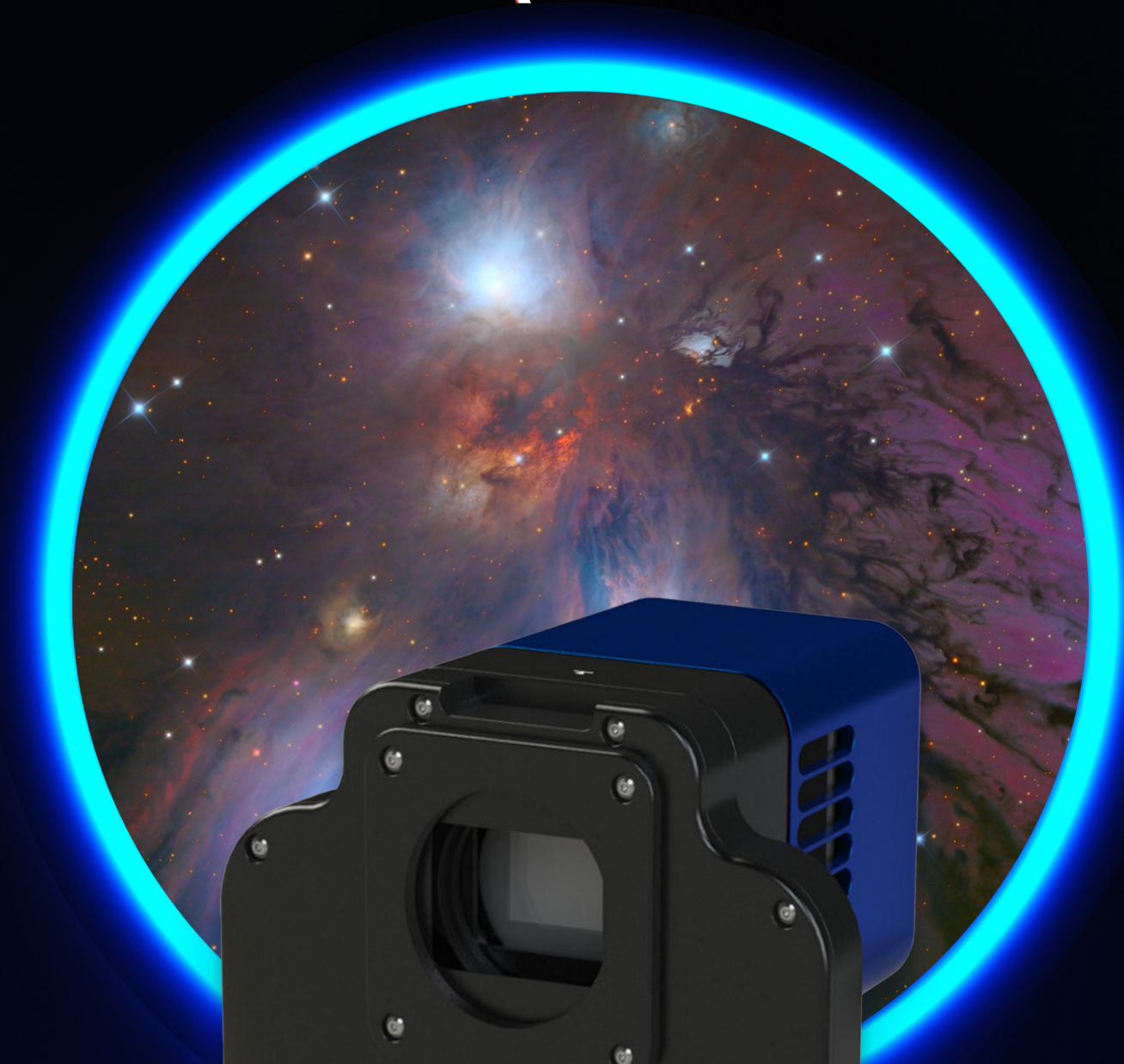


QSI



QSI



700
SERIES



QUANTUM. SCIENTIFIC. IMAGING



For nearly 20 years QSI has been synonymous with high-quality desirable cameras for astronomers. Now in 2024 we proudly announce the 700 Series.

In two decades, much has changed beyond recognition. Sensors are now back-illuminated CMOS with native 16-bit digitisation. QE is an amazing 90% and readout is a speedy 120 million pixels per second over USB3, a performance that once was unimaginable. What is maintained by QSI's newest cameras is the integrated design, attention to detail, and bulletproof reliability.

In the design of the 700 series we have taken our best technology. Filterwheels are mechanically indexed to ensure the most precise locations and perfect flat fields. The fused silica window is dew resistant and is coated on both sides with high transmission anti-reflective coating to minimise halos. The cameras use a highly efficient 2-stage Peltier cooler that draws less current and delivers more cooling than some other cameras.

SPECIFICATIONS

	760	726
Image Sensor	Sony IMX455 mono CMOS sensor	Sony IMX571 mono CMOS sensor
Resolution	9576 x 6380	6244 x 4168
Pixel Pitch	3.76 µm	3.76 µm
Sensor Size	43.3mm diagonal (36mm x 24mm)	28.3mm diagonal (23.5mm x 15.7mm)
Full Well	51,000 e-	51,000 e-
Read Noise	1.2 e-	1.7 e- (typical)
Set Point Cooling at ambient of 20 C	-25 °C	-25°C
Frame Rate	2 FPS (Full Frame image)	4FPS (Full Frame image)
Mount Type	M54 x 0.75	M54 x 0.75
ADC	16 bit	16 bit
Backfocus Distance	31mm	31mm
Reading Mode	Rolling shutter	Rolling shutter
Exposure Range	1 ms - 24 hours	1 ms - 24 hours
Dark Current	0.005 e-/p/s	0.0008 e-/p/s
Filter Wheel <small>Mechanical indexing for reproducible flats</small>	Filterwheel for 2" or unmounted 50mm filters, 5 or 7 position	Filterwheel for 2" or unmounted 50mm/ 36mm filters
Accessories	Off-Axis guide unit	Off-Axis guide unit
Computer System Requirements	Windows 10+ Linux USB 3.0 8GB Ram 64 bit Operating System.	Windows 10+ Linux USB 3.0 8GB Ram 64 bit Operating System.

USB2 HUB in for connection to guide camera, 2.1mm 12V power out.

Image by Kevin Morefield

700

SERIES

700 SERIES

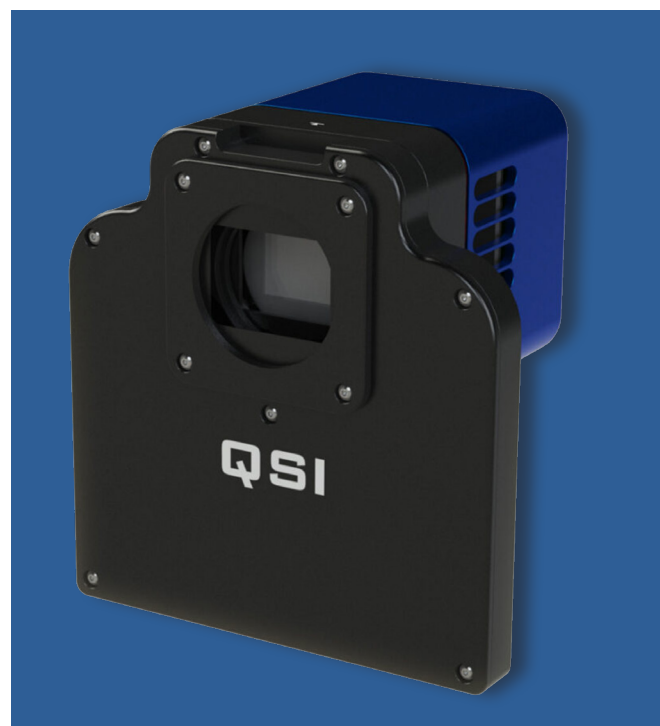
The new 700 series features: The best CMOS sensors, high-quality electronics, an integrated design case and European manufacture.

QSI 760

The QSI 760 is our flagship product. The full frame IMX455 is widely regarded as the premium sensor for astronomers. The integrated 2"/50mm filter wheel minimises back focus, essential for the widest compatibility with focal reducers. Cable clutter is reduced thanks to the integrated filter wheel, 2 USB2 in sockets and power out. Power sockets have threaded connections for maximum reliability.

QSI 726

The QSI 726 is the optimum camera for most amateur telescopes. The 28mm diagonal IMX571 maximises the sharpest parts of a telescope's image and is less affected by coma and vignetting than larger sensors. As with its bigger brother the 760, cable clutter is reduced thanks to the integrated filter wheel (36mm), 2 USB2 in sockets and power out. Power sockets have threaded connections for maximum reliability.



Q.S.I COMPANY

At QSI we are dedicated to the design and manufacture of class-leading astronomy cameras in Europe. We deliver higher quality products than are typically marketed to astronomers and provide superior support and service.

QSI cameras are designed in Norwich, UK by a dedicated team having many years of experience in astronomy. Skills include 10-layer high-speed PCB design and platform-independent software code base.

The manufacture takes place in a state-of-the-art facility in Lisbon, PT. Quality is controlled using an ISO9001:2015 accredited management system. The factory makes extensive use of solar power and takes seriously the potential impact of manufacture on the environment gaining ISO 14001 accreditation.

