

XGbE SERIES



More than a camera: a powerful networked imaging platform

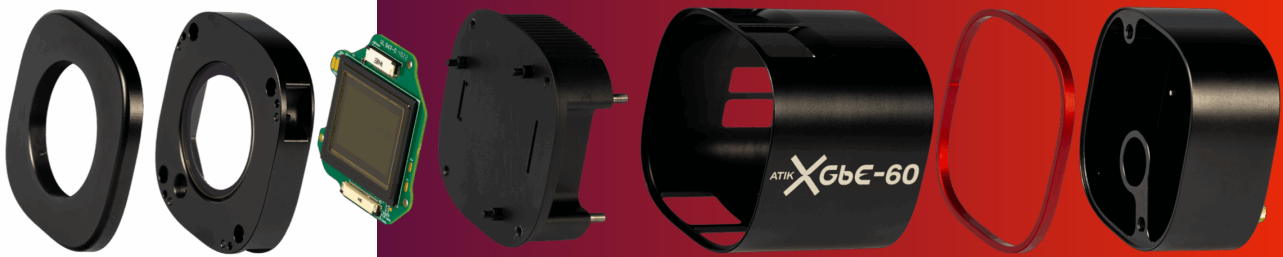
The foundation of the XGbE series lies in its **native 10 GbE IP connectivity**. Supporting SFP+ modules, it delivers data transfer rates of up to 10 gigabits per second, ensuring smooth transmission of high-resolution image streams without bottlenecks.

The XGbE series is a powerful solution for multi-camera installations and complex imaging environments:

- Large-format CMOS sensors
- State-of-the-art cooling - air cooling and liquid cooling versions available
- Ultra-low noise
- Robust network features

	XGbE-26	XGbE-60
Image sensor	Sony IMX571 CMOS (Mono/Color)	Sony IMX455 CMOS (Mono/Color)
Resolution	6252 × 4176	9576 × 6388
Connectivity	Up to 10 Gb/s (SFP+)	Up to 10 Gb/s (SFP+)

A new benchmark for Space Domain Awareness and Scientific imaging systems.



Key Benefits

Network-based architecture

Multiple units can be deployed across complex environments without overwhelming system resources. Each camera can be individually managed and monitored, allowing operators to scale from a single unit to a large, synchronized array with ease.

Mission-Critical Reliability

Multi-server support provides automatic failover protection. If one server goes down, your cameras continue capturing to backup servers, ensuring continuous operation in critical environments.

Exceptional Performance at Scale

The cluster-optimized development handles massive volumes of high-resolution imagery across multiple cameras simultaneously: received at 100Gb/s - or higher - and scalable to higher bit rates to maximize the number of cameras per server.

Synchronization Without the Headaches

Precision PTP and NTP protocols deliver perfect frame alignment across all cameras. One GPS module synchronizes your entire network. No need for electrical trigger cables between cameras means dramatically simplified installation and reduced maintenance.

State-of-the-art-cooling

The XGbE platform is available with air cooling or liquid cooling: two different thermal control systems providing flexibility to achieve consistent performance (35°C below ambient) for different use cases.



XGbE Technical Specifications

	XGbE-26	XGbE-60
Image sensor	Sony IMX571 CMOS (Mono/Color)	Sony IMX455 CMOS (Mono/Color)
Resolution	6248 × 4176	9576 × 6388
Sensor diagonal (effective pixels)	28.3 mm (23.5 mm x 15.7 mm)	43.3 mm (36 mm x 24 mm)
Pixel size	3.76 µm	3.76 µm
Full well capacity	~51 000 e ⁻	~51 000 e ⁻
Read noise	~1.4 e ⁻ (High Gain Mode) ~3.6 e ⁻ (Low Gain Mode)	~1.4 e ⁻ (High Gain Mode) ~3.6 e ⁻ (Low Gain Mode)
Dark current	~0.0008 e ⁻ /p/s at -15°C	~0.0002 e ⁻ /p/s at -15°C
Cooling Capacity	35°C below room temperature [testing conditions: 25°C; 50% humidity, non-condensing]	35°C below room temperature [testing conditions: 25°C; 50% humidity, non-condensing]
Mount type	M54 × 0.75 mm	M54 × 0.75 mm
ADC	16 bit	16 bit
Back focus distance	17.5 mm ±0.5 mm (9 mm ±0.5 without levelling plate)	17.5 mm ±0.5 mm (9 mm ±0.5 without levelling plate)
Reading mode	Electronic Rolling Shutter	Electronic Rolling Shutter
Exposure range	0.001s to 24 hours	0.001s to 24 hours
Frame rate	4 FPS	4 FPS
Power supply	12VDC 5A	12VDC 5A