Unbeatable shutter speed for blur-free astonishingly detailed images

iXM-GS120





iXM-GS120

For customers who need to capture the finest details of rapidly moving objects, the Phase One iXM-GS120 camera delivers the accuracy and resolution required at the highest speed possible due to its electronic global shutter.

Unlike competitors, the unrivalled dynamic range and image quality enables you to capture the details you need even under highly unfavorable environmental conditions, ensuring you can operate under any circumstances.







Large number of pixels

Its 12,768 x 9,564-pixel count captures images of very large area in incredible quality and detail.



High dynamic range

The iXM-GS12O's high dynamic range means it captures exceptionally detailed images under varying light condition.



No mechanical shutter required

The electronic global shutter ensures that the iXM-GS120 is extremely robust and long-lasting with low-to-no maintenance.



Fastest shutter speed on the market

Set exposure times up to 1/16,000 of a second to capture perfect still frames of fast-moving objects.

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iXM-GS120 Technical specifications

| SPECIFICATIONS | Sensor type | CMOS Global Shutter | | |
|----------------|--|--|--|--|
| | Resolution | 12,768 x 9,564 120 MP | | |
| _ | Color options | RGB & Achromatic | | |
| | Dynamic range (dB) | 80 | | |
| | Pixel size (µm) | 3.45 | | |
| | Light sensitivity (ISO) | RGB: 200 - 6400 ACH: 800 - 25600 | | |
| | Max field of view (°) | 63 | | |
| | Max shutter speed (sec) | 1/16000 | | |
| | Camera type | Medium format | | |
| | Continuous frame rate (fps) | Up to 5* | | |
| | Burst frame rate (Hz) | 12 | | |
| | RAW file compression (approx.) (IIQ) | 95 MB | | |
| | Lens mount | Phase One RSM and RS | | |
| INTERFACE | Image data | USB 3.0, Ethernet 10G (Fiber/Copper) | | |
| | API | Phase One SDK | | |
| | H/W signals | Inputs: Trigger, Black reference Outputs: Camera | | |
| | | ready, MEP | | |
| | Internal data storage | CF Express card up to 1TB | | |
| | HDMI | 1920x1080 | | |
| | Synchronization speed in multiple camera configuration (µs) | 50 | | |
| POWER | Max. power consumption (W) | 20 | | |
| | | | | |
| | Power input (VDC) | 12 - 30 | | |
| | Power input (VDC) | 12 - 30 647 | | |
| MECHANICAL | Weight - excluding lens (g) Dimensions - | 12 - 30 647 90 x 90 x67 | | |
| MECHANICAL | Weight - excluding lens (g) | 647 | | |
| MECHANICAL | Weight - excluding lens (g) Dimensions - excluding lens (mm) | 647 90 x 90 x67 | | |
| OPERATING | Weight - excluding lens (g) Dimensions - excluding lens (mm) Interface (for mounting) | 647 90 x 90 x67 4 x M4 threads | | |
| OPERATING | Weight - excluding lens (g) Dimensions - excluding lens (mm) Interface (for mounting) Weather protection | 647 90 x 90 x67 4 x M4 threads IP53 | | |



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* = 10G required. Continuous frame rate may vary based on camera settings, image file size and host PC.

| | RSM Lenses | | | | | | |
|------------------------------------|--------------|--------------|----------------|-----------------|-----------------|--|--|
| | 35mm | 80mm | 80mm AF | 150mm AF | 300mm AF | | |
| Lens composition | 12 elements | 8 elements | 8 elements | 8 elements | 11 elements | | |
| Lens composition | in 8 groups | in 5 groups | in 5 groups | in 7 groups | in 9 groups | | |
| Focus range | Infinity | Infinity | 3m to Infinity | 10m to Infinity | 10m to Infinity | | |
| Shutter speed max. | 1/2500 | 1/2500 | 1/2500 | 1/2500 | 1/2000 | | |
| Exposure control | 1/3 f - stop | 1/3 f - stop | 1/3 f - stop | 1/3 f - stop | 1/3 f - stop | | |
| Exposure control | increments | increments | increments | increments | increments | | |
| Aperture range | f/5.6 - f/22 | f/5.6 - f/22 | f/5.6 - f/22 | f/5.6 - f/22 | f/8 - f/32 | | |
| Filter diameter (mm) | 58 | 58 | 58 | 58 | 86 | | |
| Total length (mm) with camera | 144 | 164 | 164 | 199 | 328 | | |
| Weight (g/lb) | 540 | 470 | 630 | 744 | 1900 | | |
| Angle of view - Long side (°) | 64.4 | 30.8 | 30.8 | 16.7 | 8.4 | | |
| Angle of view - Short side (°) | 50.5 | 23.3 | 23.3 | 12.6 | 6.3 | | |
| Entrance pupil to image plane (mm) | 72 | 85 | 85 | 107 | 85.5 | | |

| | RS Lenses | | | | | |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 50mm | 70mm | 90mm | 110mm | 150mm MK II | 180mm |
| Lens composition | 10 elements | 9 elements | 9 elements | 6 elements | 8 elements | 7 elements |
| | in 7 groups | in 7 groups | in 8 groups | in 5 groups | in 7 groups | in 3 groups |
| Focus range | Infinity | Infinity | Infinity | Infinity | Infinity | Infinity |
| Shutter speed max. | Up to 1/2500 | Up to 1/2500 | Up to 1/2000 | Up to 1/2500 | Up to 1/2500 | Up to 1/2000 |
| | 1/3 f - stop |
| Exposure control | increments | increments | increments | increments | increments | increments |
| Aperture range | f/4 - f/22 | f/5.6 - f/22 | f/5.6 - f/22 | f/4 - f/22 | f/5.6 - f/22 | f/6.3 - f/22 |
| Filter diameter (mm) | 67 | 58 | 72 | 58 | 86 | 67 |
| Total length (mm) with camera | 181 | 179 | 224 | 184 | 257 | 283 |
| Weight (g/lb) | 800/1.76 | 580/1.27 | 1150/2.53 | 620/1.37 | 1150/2.53 | 1400/3.1 |
| Angle of view - Long side (°) | 47.5 | 34.9 | 27.5 | 22.6 | 16.7 | 14 |
| Angle of view - Short side (°) | 36.5 | 26.5 | 20.8 | 17.1 | 12.6 | 10.5 |
| Entrance pupil to image plane (mm) | 99.3 | 91.1 | 130.8 | 76.1 | 65.8 | 141.5 |

iXM-GS120 Additional benefits and features



120 Megapixels image data at 6 fps



Camera control and image processing SDK



Geotagged images



Ready for remote update



Continuous HD video stream



Weather and dust proof



1 TB in camera storage



Secured connectors

f in 🖸 geospatial.phaseone.com



Lightweight and compact



Low power consumption



* = 10G required. Continuous frame rate may vary based on camera settings, image file size and host PC.