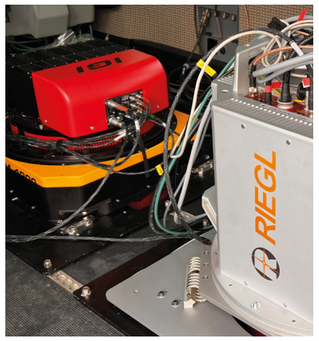
COSTUM SOLUTIONS

At IGI, we provide our customers a unique and leading system. While maintaining the IGI Modular Concept, IGI's customers can choose of an array of solutions including stabilized mount support, LiDAR, hyperspectral and thermal camera integrations as well as custom solutions for fixed-wing aircrafts, helicopters, gyrocopters and UAV/RPAS platforms.
For the IGI UrbanMapper-2 EVO different camera modules with 150 or 100 Mpixel and lens options are possible on request.

IGI URBANMAPPER-2
Performance installed in Cessna Caravan

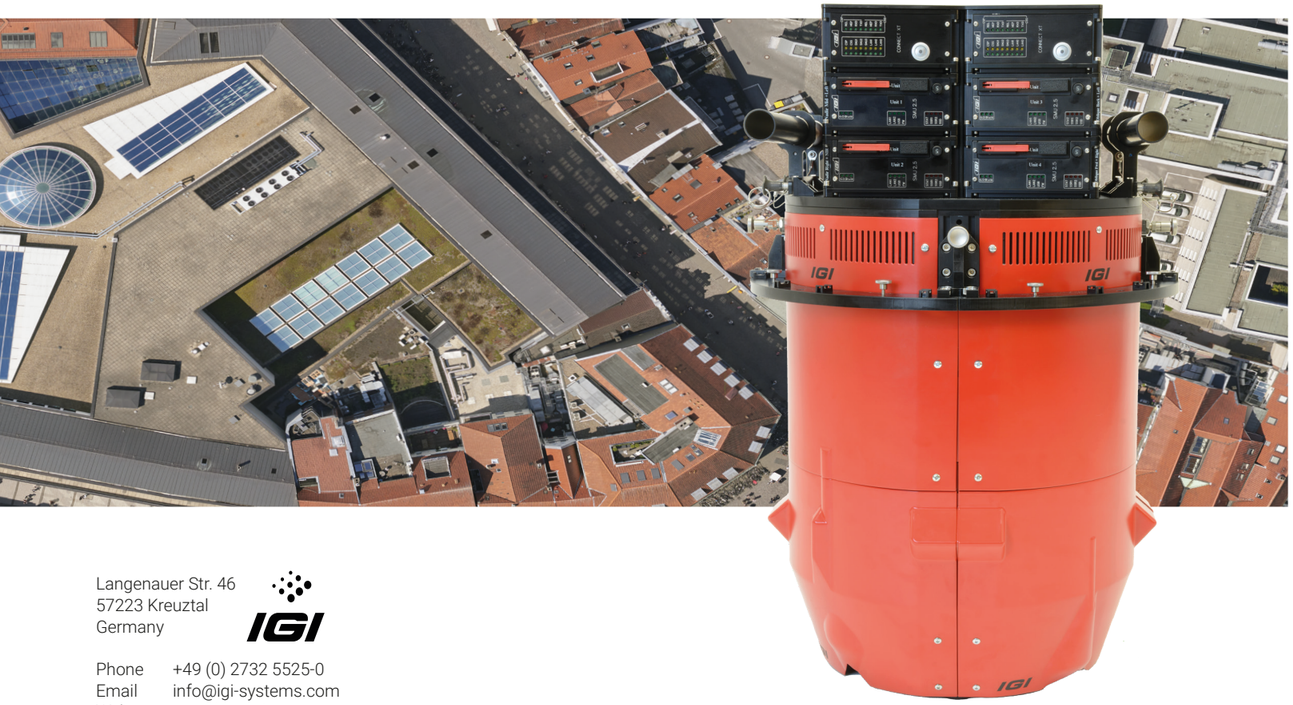
IGI URBANMAPPER-2
Performance installed in GSM-4000



IGI URBANMAPPER-2 + RIEGL VQ-1560
in dual-hatch C208 in Master-Slave Configuration

SMART SOLUTIONS

Please contact us or your local partner for your custom sensor configuration and installation.



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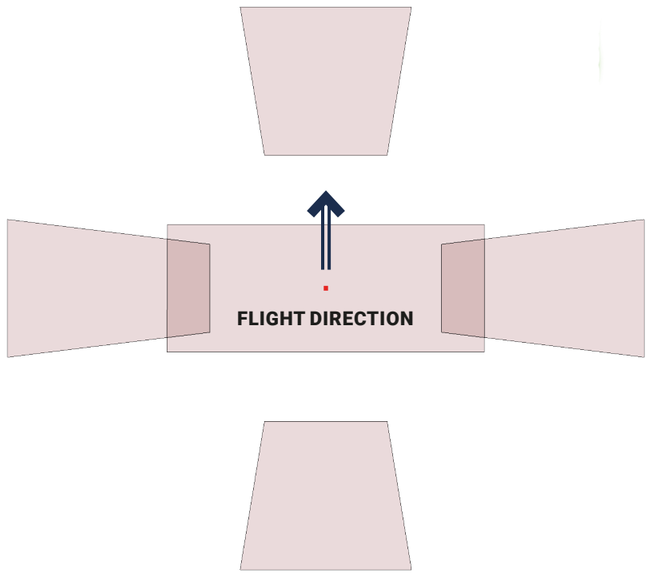
IGI URBANMAPPER - 2 EVO

SCAN ME

When it comes to large-scale mapping and urban modeling, **coverage and accuracy matter most**. That's why IGI introduces the **UrbanMapper-2 EVO**, delivering the **largest swath available on the market—an incredible 34,500 pixels**. This means **maximum area coverage, fewer flight lines, and unmatched efficiency** for your projects.

Powered by Phased One 150 MP Back-Side Illuminated (BSI) CMOS technology, the UrbanMapper-2 EVO captures **ultra-high-resolution imagery** with exceptional detail. With a **shutter speed of up to 1/2500 sec** and an impressive **83 dB dynamic range**, it ensures brilliant image quality—even under challenging light conditions.



SPECIFICATIONS | IGI URBANMAPPER-2 EVO

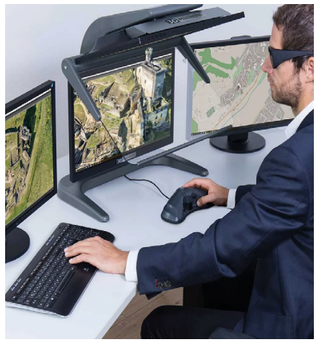
Nadir Sensor Size, RGBI*, RGB	34,500 x 14,100 pixels
Oblique Sensor Size, RGBI*, RGB	14,204 x 10,652 pixels, portrait or landscape at choice
Channels	RGBI, RGB, CIR, NIR (nadir), 4x RGB (oblique)
Sensor Technology	BSI (Back Side Illuminated) CMOS
Pixel Size	3.76 µm
Maximum Frame Rate	up to 0.6 sec
Dynamic Range	83 dB
Compensation	FMC by BCM
SSD Hot-plug Storage Units with IGI Redundant Storage Technology	Storage Units for >13,500 events (16, 8, 4 TB)
Shutter	Electronically controlled leaf shutter
Shutter Speed Options	Up to 1/2500 sec
Analog to Digital Conversion	16 bit
Lenses	90, 110, 150, 180 mm for nadir & oblique RGB / 35, 70 mm for NIR
Maximum Operating Attitude	No limit
Integrated Sensor Manangement (IGIvisu) **Integrated GNSS/IMU System (AEROcontrol)** **Integrated Mission Planning & Flight Guidance (CCNS-5 with IGIplan)**	

	IGI UrbanMapper-2 EVO	
Physical Dimensions	IGI UrbanMapper-2 EVO	ø 408 x 740 mm ø 16 x 29.13 inches
	IGI UrbanMapper Operator Screen: 4K (3840 x 2560) ultra-high resolution multi-touch-screen as operator interface (20")	475 x 334 x 12,5 mm 18.7 x 13.15 x 0.5 inches
	IGI CCNS-5 for Pilot / Operator	175 x 125 x 35 mm 6.89 x 4.92 x 1.38 inches
System Weight	IGI UrbanMapper-2 EVO	61 kg (134 lbs)
	IGI UrbanMapper Operator Screen	2,4 kg (5.3 lbs)
	IGI CCNS-5 for Pilot / Operator	0,8 kg (1.7 lbs)
	Cabeling, antenna, etc.	3,5 kg (7.7 lbs)
Power Consumption	IGI UrbanMapper	420 W @ 28 VDC
	IGI UrbanMapper Operator Screen	80 W @ 28 VDC
	IGI CCNS-5 for Pilor / Operator	14 W @ 28 VDC each
Total System Weight / Power Consumption	68.6kg (151.2 lbs) 530 W @ 28 VDC	

* Different sensor & lens combinations are available on request. Please contact our sales team for details.

TURN-KEY SOLUTION WITH PROVEN WORKFLOW

Together with several industrial partners, IGI provides an integrated workflow for the generation of orthophotos, 3D stereo vector digitizing and a full automatical workflow for the production of 3D city models.



3D STEREO PLOTTING
Easy 3D Stereo vector digitizing
e.g. with Summit Evolution™

ORTHOFOTO-IMAGERY
Automatic generation of
true-ortho and orthophotomaps

3D CITY MODELING & DIGITAL TWIN
Automatic generation of
3D-mapping digital content e.g. Skyline PhotoMesh
or Esri ArcGIS Reality Studio

IGI URBANMAPPER-2 EVO IMAGE MOTION

The camera modules in the IGI UrbanMapper-2 EVO are designed to operate at an exposure time of 1/2500 second. Due to the high sensitivity of the BSI-CMOS sensor and the wide dynamic range, this fast exposure time is possible under all relevant light conditions and blur free imagery is assured even with high flying speeds.

IGI URBANMAPPER-2 EVO FOOTPRINT / IMAGE MOTION AT DIFFERENT GSD

GSD nadir	GSD oblique	Flying Height	Width of image across RGBI / RGB	Length of image along	Image Motion 70 kn (130 km/h)	Image Motion 150 kn (280 km/h)
2 cm	2,7 cm	474 m / 1,555 ft	609 m	282 m	0.9 px	1.9 px
2,5 cm	3,4 cm	592 m / 1,944 ft	762 m	353 m	0.7 px	1.6 px
5 cm	6,7 cm	1,185 m / 3,887 ft	1,523 m	705 m	0.4 px	0.8 px
8 cm	10,8 cm	1,896 m / 6,220 ft	2,437 m	1,128 m	0.2 px	0.5 px
10 cm	13,5 cm	2,370 m / 7,775 ft	3,046 m	1,410 m	0.2 px	0.4 px
15 cm	20,2 cm	3,555 m / 11,662 ft	4,569 m	2,115 m	0.1 px	0.3 px
20 cm	26,9 cm	4,739 m / 15,549 ft	6,092 m	2,820 m	0.1 px	0.2 PX

IGI URBANMAPPER-2 EVO STEREO COVERAGE

The following table shows the possible forward overlap and the related frame rate. A 80% forward overlap or more is recommended for the automatic production of dense point clouds, DSMs, true orthophotos and 3D city models.

IGI URBANMAPPER-2 EVO FOOTPRINT / IMAGE MOTION AT DIFFERENT GSD

GSD nadir	GSD oblique	Frame Rate at 60% forward overlap	Frame Rate at 80% forward overlap	Forward overlap at 0.5 sec frame rate
2 cm	2,7 cm	1.5 sec	0.7 sec	86 %
2,5 cm	3,4 cm	1.8 sec	0.9 sec	89 %
5 cm	6,7 cm	3.6 sec	1.8 sec	94 %
8 cm	10,8 cm	5.8 sec	2.9 sec	97 %
10 cm	13,5 cm	7.3 sec	3.6 sec	97 %
15 cm	20,2 cm	10.9 sec	5.4 sec	98 %
20 cm	26,9 cm	14.5 sec	7.3 sec	99 %