



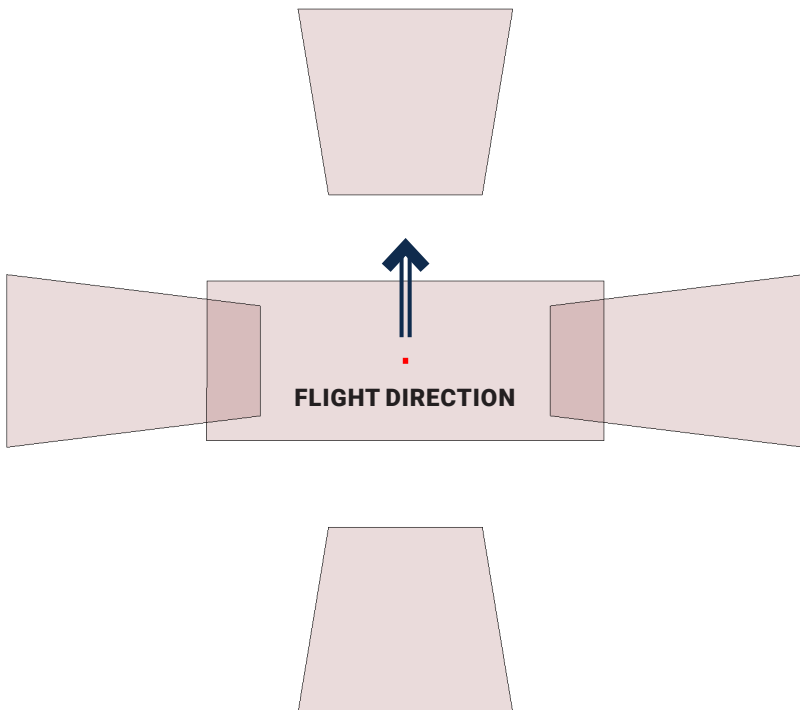
IGI URBANMAPPER - 2 PERFORMANCE



SCAN ME

IGI introduces the all-new IGI UrbanMapper-2 PERFORMANCE. The IGI UrbanMapper-2 PERFORMANCE utilizes 150MP Back Side Illuminated, BSI-CMOS technology to provide ultra-high resolution image.

With the latest BSI-CMOS technology, a shutter speed up to 1/2500 of a second and the high dynamic range of 83dB, the IGI UrbanMapper-2 PERFORMANCE is designed to produce brilliant imagery even under challenging light conditions. The system offers outstanding performance for dense image matching with up to 0.6 sec image repetition rate. It features ultra wide nadir sensor with stunning 450MP and 150MP for each of the 4 oblique channels.



SPECIFICATIONS | IGI URBANMAPPER-2 PERFORMANCE

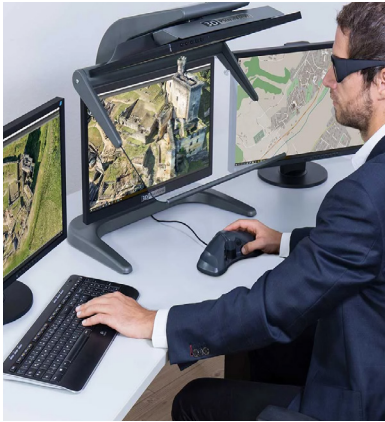
Nadir Sensor Size	34,500 x 14,100 pixels	
Oblique Sensor Size	14,204 x 10,652 pixels	
Channels	RGBI, RGB, CIR, NIR (nadir), 4x RGB (oblique)	
Sensor Technology	BSI (Back Side Illuminated) CMOS	
Pixel Size	3.76 µm	
Maximum Frame Rate	up to 0.6 sec	
Dynamic Range	83 dB	
Compensation	FMC by BCM	
SSD Hot-plug 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 mm for nadir & oblique RGB / 35, 70 mm for NIR	
Maximum Operating Attitude	No limit	
Integrated Sensor Management (IGIvisu)		
Integrated GNSS/IMU System (AEROcontrol)		
Integrated Mission Planning & Flight Guidance (CCNS-5 with IGIplan)		
Physical Dimensions	UrbanMapper IGI	
	IGI UrbanMapper Sensor Part	∅ 402 - 430 x 565 mm
	IGI UrbanMapper SMU Part	340 x 370 x 364 mm
	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
System Weight	IGI UrbanMapper Sensor Part	55 kg (121 lbs)
	IGI UrbanMapper SMU Part	15 kg (33 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	380 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	77,5 kg (170.4 lbs) 488 W @ 28 VDC	

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

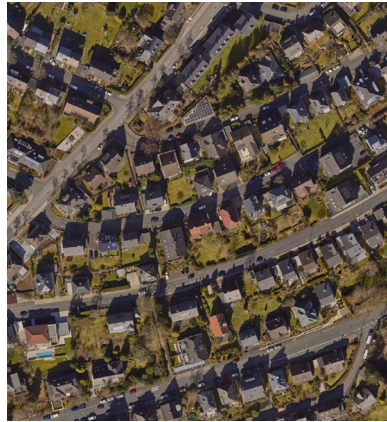


TURN-KEY SOLUTION WITH PROVEN WORKFLOW

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



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



ORTHOFOOTO-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 Reality Studio

IGI URBANMAPPER-2 PERFORMANCE IMAGE MOTION

The camera modules in the IGI UrbanMapper-2 PERFORMANCE 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-2P 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 PERFORMANCE 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-2P 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 %

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 PERFORMANCE 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



URBAN MAPPER-2
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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