



VISIONMAP
Digital mapping systems

The largest footprint
in the market

Airborne
Digital Mapping Camera

A3



The well known A3 airborne digital camera has already become synonymous with productivity in the aerial survey and mapping industry

A3 largest footprint

With 60,000 pixels across flight track, A3 presents by far the largest footprint of aerial cameras available in the market.

Superior high-resolution imagery

A3 camera allows your airplane to fly higher, faster and with wider flight line spacing, covering a larger area than other systems do. A3 camera's long focal length capture high-resolution imagery from higher altitudes, simplifying the flight planning and operations of survey projects.

Multiple products in one flight

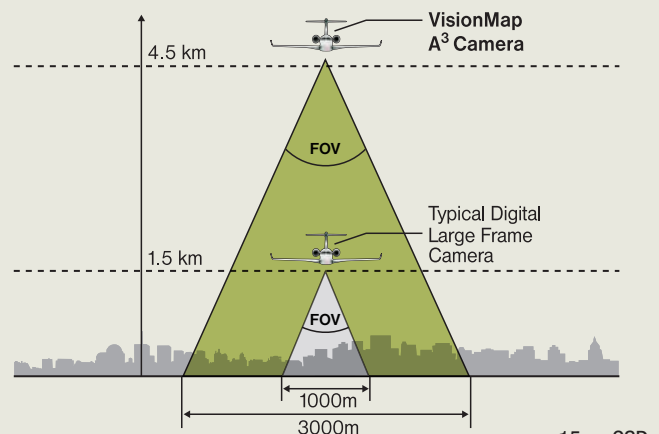
With a wide field-of-view (up to 109 degrees), A3 collects multi-directional images of each point in both vertical and oblique angles.

Compact system, easy installation

A3 was designed for complete ease of use, with compact size and light weight. The camera is easy to install and use on most camera-ready aircrafts.

With the largest footprint of 60,000 pixels across flight track, efficient imagery collection of large areas and high-resolution vertical and oblique imagery, A3 airborne digital camera is the most advanced mapping camera available today

Larger coverage, same resolution



A3 aerial survey productivity

GSD (m)	0.03	0.05	0.10	0.15	0.20	0.25	0.30
Altitude above ground (feet)	3,281	5,468	10,936	16,404	21,872	27,340	32,808
Typical ground speed (knots)	160	180	210	245	275	325	370
Flight-line distance (m)	237	529	2,184	3,728	5,596	7,809	10,392
Footprint width (m)	590	1,322	5,569	9,351	14,009	19,451	25,957
Net coverage for orthophoto production (km²/hour)	70	176	849	1,692	2,850	4,700	7,121

A3/A3 CIR specification summary

Camera Type	A3/ A3 CIR	Camera Type	A3/ A3 CIR
Mechanical Specifications		Image Specifications	
Total weight (kg)	35	Image geometry	Central projection
Size (cm)	53 x 53 x 53	Color	RGB A3 CIR: RGB + NIR
Optical Specifications		Image file format	JPEG2000, TIFF
Number of lenses	2	Flight Specifications	
Focal length (mm)	300	Minimal flight altitude (feet)	2,700
Aperture	f/4.5	GSD at minimal flight altitude (cm)	2.5
Exposure principle	Global shutter	Aircraft ground speed (knot)	50 – 500
CCD type	KAI-11002	Forward overlap between sweeps in one flight line (%)	30% - 90%
CCD number	2	Image on-the-fly viewing	Yes
CCD dynamic range (bit)	12	Temperature (°C)	-15° to 55°
CCD pixel size (μ)	9	On-board Storage	
CCD array (single frame size, pixel)	4006 x 2666	On-board storage capacity (TB)	1.0
Double frame Size (pixel)	7812 x 2666	On-board storage type	SSD - Solid State Drive
One lens FOV: Along flight line (degree) Across flight line (degree)	6.58° 4.58°	On-board storage exchangeability	Yes
Spectral characteristics (nm)	R 600-740 G 510-580 B 415-515 A3 CIR : NIR 690-780	System Specifications	
Operational Specifications		DC supply voltage (V)	28V (26V-32V)
Frame rate (fps)	7.5	Current consumption (A)	2.5 A (Max-4A)
Max operational FOV (degree)	109°	Power consumption (W)	<120W/28 VDC
Max number of frames in one sweep	66 A3 CIR: RGB 33; NIR 33	GPS type	L1/L2
Max footprint size (pixel)	~ 62,000 x 8,000 A3 CIR ~ 62,000 x 4,000	Image download interface	Gb Ethernet
Motion compensation	(FMC,RMC,VC) Forward, Roll, Vibration	Writing bit rate (MB/sec)	165

About VisionMap

VisionMap LTD. is a leading provider of state-of-the art digital automatic aerial survey and mapping systems. VisionMap created an innovative data collection and data processing system which optimized geospatial imagery collection and processing, setting a new standard for productivity. VisionMap systems are successfully deployed worldwide.