Leica DMC III

Breaking new ground. Always.





World's largest swath

Based on the all-new CMOS sensor, specifically engineered for airborne applications, the Leica DMC III mapping solution is breaking new ground. With the most efficient workflow available, this camera offers the world's largest swath generated by a single frame capturing 25,000+ pixels across.

CMOS

Revolutionary CMOS technology

The Leica DMC III is the first large format camera using CMOS sensor technology reaching beyond the limitations of traditional CCD technology. The sensor captures more information with 100% increase in dynamic range and unsurpassed image quality thanks to less image noise and almost zero blooming.



Most efficient & intuitive workflow

The intuitive common data processing platform RealWorld features a simple yet powerful workspace that allows the user to easily manage even the largest data sets. Starting from data download, raw QC to basic data management, it guides you through the sensor-specific processing steps.





Leica DMC III product specifications

PAN

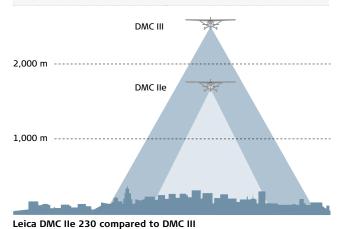
Pixel across track	25,728
Pixel along track	14,592
FoV across track	57.2°
FoV along track	34.4°
Focal length	92 mm
Pixel size	3.9 µm
GSD@500m	2.1 cm

MS

Pixel across track	8,956	
Pixel along track	6,708	
FoV across track	61.7°	
FoV along track	48.2°	
Focal length	45.0 mm	
Pixel size	6.0 μm	
GSD@500m	6.7 cm	

GENERAL

GENERAL	
В/Н	0.25
Number of camera heads	5
PAN: colour resolution	1:3.1
Frame rate	1.9 sec
Colour channels	R,G,B, NIR
Resolution per pixel	14-bit
FMC, mechanical	Yes
Dynamic range (CMOS)	78 dB
Onboard storage	9.6 TB to store up to 7900 images
Weight	63 kg
Power consumption	280 W, camera incl. MM30 storage modules
Altitude non pressurised	25,000 ft (7,620 m)
Operating temperature Camera control electronic Optics	0 °C to +40 °C, upper part - 20 °C to + 40 °C, lower part



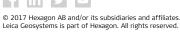
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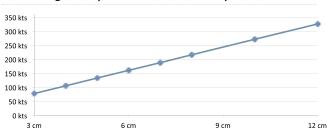




MAXIMUM GROUND SPEED

GSD	60 % forward overlap	80 % forward overlap
3 cm	161 kts	81 kts
4 cm	213 kts	108 kts
5 cm	267 kts	135 kts
6 cm	325 kts	162 kts
7 cm	370 kts	189 kts
8 cm	431 kts	215 kts
10 cm	541 kts	271 kts
12 cm	640 kts	319 kts
15 cm	781 kts	406 kts
20 cm	1,074 kts	537 kts
25 cm	1,343 kts	671 kts
30 cm	1,611 kts	806 kts

Maximum ground speed 80 % forward overlap



FLYING HEIGHT AND SWATH WIDTH

GSD	Flying height (m)	Flying height (ft)	Swath width
3 cm	708 m	2,322 ft	772 m
5 cm	1,179 m	3,870 ft	1,286 m
10 cm	2,359 m	7,739 ft	2,573 m
15 cm	3,538 m	11,609 ft	3,859 m
20 cm	4,718 m	15,479 ft	5,146 m
25 cm	5,897 m	19,349 ft	6,432 m
30 cm	7,077 m	23,218 ft	7,718 m
33 cm	7,785 m	25,540 ft	8,490 m
35 cm	8,256 m	27,088 ft	9,005 m
40 cm	9,436 m	30,958 ft	10,291 m
45 cm	10,615 m	34,827 ft	11,578 m

Flying height and GSD

