

RGB Camera Specification Sheet

The best sensors for every mapping application

SONY RX1RII



Take advantage of the ultra-high resolution of the 42.4 MP full-frame sensor to achieve GSD and accuracy down to 1 cm! Map 1 km² in 30 minutes with a GSD of 1.6 cm.



SONY QX1



The industry workhorse and proven payload for many professional users. Map 1 km² in 30 minutes with a GSD of 3 cm.



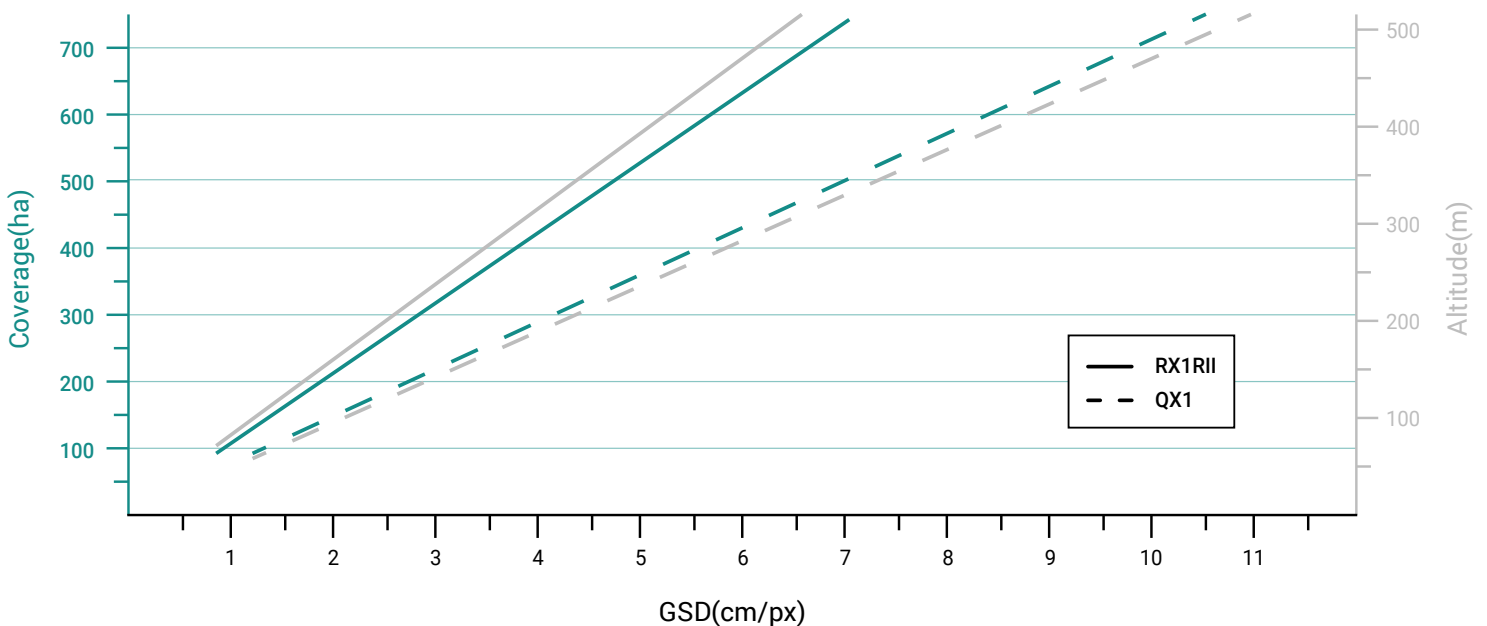
Details

Sensor layout	Full Frame	APS-C
Spectral bands	RGB	RGB
Sensor size	35.9 x 24 mm	23.2 x 15.4 mm
Pixel pitch	4.51 µm	4.25 µm
Pixel count	42.4 MP	20.1MP
Shutter type	Leaf shutter	Focal plane
Pixels array	7952 x 5304 px	5456 x 3632 px
Weight	505 g (incl. battery & SD card)	285 g (incl. battery & SD card)
Focal length of lens	35 mm	20 mm
Trigger frequency	1.2 Hz at full resolution	1.0 Hz at full resolution

Results

Lowest achievable GSD	0.85 cm/px	1.2 cm/px
Flight altitude	66 m	57 m
Frontal overlap	70 %	67 %
Max coverage	89 ha	87 ha
GSD at 1.5 cm/px	1.5 cm/px	1.5 cm/px
Flight altitude	117 m	71 m
Frontal overlap	83 %	75 %
Max coverage	157 ha	108 ha

GSD at 2 cm/px		
	2 cm/px	2 cm/px
Flight altitude	156 m	95 m
Frontal overlap	87 %	81 %
Max coverage	210 ha	144 ha
GSD at 2.5 cm/px		
	2.5 cm/px	2.5 cm/px
Flight altitude	194 m	118 m
Frontal overlap	90 %	85 %
Max coverage	262 ha	180 ha
Flight altitude at 100 m		
	100 m	100 m
GSD	1.3 cm/px	2.1 cm/px
Frontal overlap	80 %	82 %
Max coverage	135 ha	153 ha
Flight altitude at 120 m		
	120 m	120 m
GSD	1.5 cm/px	2.6 cm/px
Frontal overlap	80 %	85 %
Max coverage	162 ha	184 ha
Flight altitude at 500 m		
	500 m	500 m
GSD	6.4 cm/px	10.6 cm/px
Frontal overlap	96 %	96 %
Max coverage	675 ha	764 ha



Results depend upon environmental conditions