

# 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 0.4 in! Map 500 ac in one flight with a GSD of 0.6 in.



## SONY UMC-R10C



The industry workhorse and proven payload for many professional users. Map 600 ac in one flight with a GSD of 1.2 in.



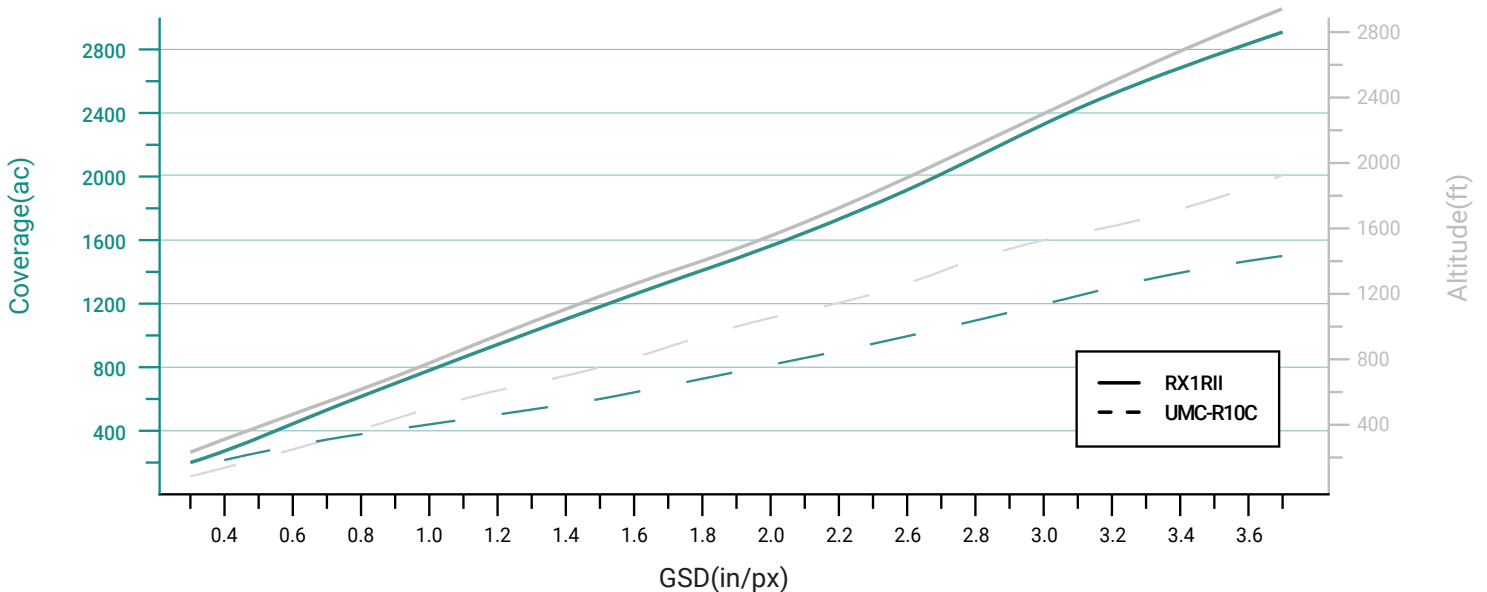
### Details

|                      |                                   |                                 |
|----------------------|-----------------------------------|---------------------------------|
| Sensor layout        | Full Frame                        | APS-C                           |
| Spectral bands       | RGB                               | RGB                             |
| Sensor size          | 1.4 x 0.95 in                     | 0.9 x 0.6 in                    |
| Pixel pitch          | 4.51 $\mu\text{m}$                | 4.25 $\mu\text{m}$              |
| Pixel count          | 42.4 MP                           | 20.1MP                          |
| Shutter type         | Leaf shutter                      | Focal plane                     |
| Pixels array         | 7952 x 5304 px                    | 5456 x 3632 px                  |
| Weight               | 17.8 oz (incl. battery & SD card) | 10 oz (incl. battery & SD card) |
| Focal length of lens | 1.4 in                            | 0.8 in                          |
| Trigger frequency    | 1.2 Hz at full resolution         | 1.0 Hz at full resolution       |

### Results

|                       |            |            |
|-----------------------|------------|------------|
| Lowest achievable GSD | 0.33 in/px | 0.47 in/px |
| Flight altitude       | 216 ft     | 186 ft     |
| Frontal overlap       | 70 %       | 67 %       |
| Max coverage          | 262 ac     | 256 ac     |
| GSD at 0.5 in/px      | 0.5 in/px  | 0.5 in/px  |
| Flight altitude       | 325 ft     | 197 ft     |
| Frontal overlap       | 80 %       | 71 %       |
| Max coverage          | 392 ac     | 270 ac     |

| GSD at 0.75 in/px         |  | 0.75 in/px | 0.75 in/px |
|---------------------------|--|------------|------------|
| Flight altitude           |  | 486 ft     | 295 ft     |
| Frontal overlap           |  | 87 %       | 80 %       |
| Max coverage              |  | 588 ac     | 406 ac     |
| GSD at 1 in/px            |  | 1 in/px    | 1 in/px    |
| Flight altitude           |  | 646 ft     | 394 ft     |
| Frontal overlap           |  | 90 %       | 85 %       |
| Max coverage              |  | 787 ac     | 543 ac     |
| Flight altitude at 300 ft |  | 300 ft     | 300 ft     |
| GSD                       |  | 0.5 in/px  | 0.8 in/px  |
| Frontal overlap           |  | 78 %       | 81 %       |
| Max coverage              |  | 392 ac     | 432 ac     |
| Flight altitude at 400 ft |  | 400 ft     | 400 ft     |
| GSD                       |  | 0.6 in/px  | 1 in/px    |
| Frontal overlap           |  | 84 %       | 86 %       |
| Max coverage              |  | 487 ac     | 550 ac     |
| Flight altitude at 600 ft |  | 600 ft     | 600 ft     |
| GSD                       |  | 0.9 in/px  | 1.5 in/px  |
| Frontal overlap           |  | 89 %       | 90 %       |
| Max coverage              |  | 730 ac     | 826 ac     |



Results depend upon environmental conditions  
Side overlap of 60% is used for calculating results