



**Your 10-point checklist  
for aerial camera decisions**

Aerial camera concepts vary from nadir-only, nadir & oblique to wide-area mapping.  
This checklist helps you compare cameras within each concept category.

**1 IMAGE SENSORS**

Does the system offer latest CMOS sensors? What is the physical pixel size of the sensors?

**2 SYSTEM APPROACH EFFICIENCY**

Do I need the exceptional qualities of a panchromatic -based system, or would a Bayer pattern-based concept be more suitable for my needs? Consider aspects such as geometric and radiometric accuracy, resolution, and their impact on AT quality and other downstream products, including DSM, DTM, 3D models, and analytics.

How does the chosen approach impact the overall efficiency and accuracy?

**3 MOTION COMPENSATION**

How is motion compensation handled? Is it achieved through a hardware- or software-based approach, or does the system rely on reducing motion solely through short exposures at the cost of image quality? How well does motion compensation handle multi-directional, scale-dependent, and scene-aware motion blur?

**4 CAMERA DESIGN**

How many lenses are utilized, and what is their configuration—are they nadir or tilted? If tilted, by how much? How does this impact geometric and visual resolution, and what are the effects on image quality?

**5 IMAGE PROCESSING**

What image processing techniques are employed?

How do these techniques improve the quality and usability of the captured images?

**6 SYSTEM FOOTPRINT**

What are the dimensions of the image footprint, and what is the base-to-height ratio? Is this ratio conducive to photogrammetric applications? Additionally, how does the system mitigate the lean effect on the edges of super wide frames, which can render them unusable?

**7 BASIC CAMERA SPECIFICATIONS**

What are the size, weight, diameter, and power consumption specifications of the camera?

How is the camera's design optimized for installation in planes and to facilitate operation while in the air? Specifically, is there a need to restrict mount movement because of bulky camera heads, and how does this impact the system's overall functionality and flexibility?

**8 BUSINESS GENERATION EFFICIENCY**

What is the system's frame rate, and how does this affect operational efficiency?

In case of issues, how quickly can support be provided?

Assess the intuitiveness of the system's operation.

**9 DATA PROCESSING WORKFLOW**

Does the workflow support high-performance processing without the need to switch tools?

How does the workflow facilitate efficient, secure, and scalable data management?

**10 FLEXIBILITY FOR BUSINESS GROWTH**

How does the system support scalability in the short and long term? Consider both hardware upgrades and software updates. What additional support is available (webinars, user groups) for additional resources and troubleshooting?