

Phase One Introduces 3 High-Performance Lenses for Surveying and Mapping Applications



Phase One Industrial has expanded its RS and RSM lens offering with three new high-performance lenses for high-altitude aerial photography and long-range aerial and ground inspection applications. The 300mm AF, 180mm and 150mm MK II lenses are designed to enhance the performance and flexibility of Phase One Industrial's iXM-RS and iXM aerial camera series. Each offers precision imagery, taking advantage of the cameras' ultra-high-resolution backside-illuminated (BSI) CMOS sensors, to maintain a smaller ground sample distance (GSD) while flying at higher altitudes.

With the longest focal length in the line-up, the Phase One RSM 300mmAF lens offers a 5cm GSD from 13,000ft. It fits both iXM and iXM-RS camera models and produces superb image quality by enhancing the cameras' ultra-high-resolution BSI CMOS sensors (3.76

µm pixels). The lens is ideal for both high-altitude 2D and 3D mapping and long-range ground inspection. The motorized lens offers a focus range of 10m to infinity, within which a predefined distance can be set remotely. A self-locking mechanism is built in to secure the focus position against vibrations.

Oblique configurations

Specified by [Phase One](#) and built by Rodenstock Photo Optics, Germany, the Rodenstock RS 180mm lens reaches a 5cm GSD from 8,000ft. when used with the iXM-RS150F camera. The lens supports the camera's ultra-high-resolution BSI sensor for greater image quality and is integrated with a Phase One RS reliance shutter for speed and reliability. The RS 180mm enhances high-altitude aerial 2D and 3D mapping and improves efficiency in oblique configurations.

A 5cm GSD from 6,500ft. is achievable with the RS 150mm MK II lens. It complements the iXM-RS150F camera's ultra-high 150-megapixel resolution BSI CMOS sensor for acquiring quality images for high-altitude aerial 2D and 3D mapping.

Every [Phase One Industrial](#) lens is rigidly built for robustness against vibrations and shocks to meet RTCA DO160G standards, and is individually tested for performance and high-modulation across the whole image area.