

## PHASE ONE

# Fully Integrated Aerial Photogrammetry Solutions



Phase One is headquartered in Copenhagen, Denmark, with offices in New York, London, Cologne, Tokyo, Hong Kong, Shanghai, Sydney and Tel Aviv. As a division of Phase One A/S, Phase One Industrial is dedicated to research, development and manufacturing of camera systems for aerial photogrammetry as well as integrated software solutions.



Phase One is one of the world's leaders in open-platform, high-end medium-format camera systems for professional photographers and advanced amateurs. Phase One also developed Capture One raw converter and workflow software, as well as the Phase One SDK, that provides a set of tools which enables users to build custom applications for image capturing and processing of high-end images produced by iXA and iXR cameras.

Phase One's experience in medium-format digital technology forms the basis for the Phase One Industrial products. The Phase One Industrial's mission is a commitment to the development of aerial and industrial camera platforms and to provide close support to its customers. The Phase One Industrial team benefits from the many successful aerial

implementations that Phase One has already provided to well-known partners in the photogrammetric industry.

### Global village

As the world increasingly becomes the proverbial global village and as many countries' infrastructure needs to develop quickly, the Phase One iXA aerial camera system has found wide success in the photogrammetric market, both among end users and OEM integrators around the world. Specifically, the iXA is gaining traction as a major component in nadir and oblique camera set-ups, Lidar solutions and in the UAV market. Available with up to 80 megapixels, achromatic models or NIR vision, the iXA is suitable for existing or new systems whether they are single or multiple camera configurations. Because of its low weight (1.75kg) and power consumption (max. 20W), it can be integrated into a variety of aircraft including light, single-engine models.

Dov Kalinski, general manager of Phase One Industrial, explained that the company uses cutting-edge technology in its aerial cameras and software in order to assist industrial customers with solutions that advance the work they do. The iXA cameras are built from the ground up as aerial cameras, since the company is focused on enabling photogrammetric professionals to capture high-quality images at lower operational costs. He believes that the Phase One iXA camera will become the future standard for all medium-format airborne cameras.

### Lens technology

A sophisticated camera system requires a broad range of lenses to provide options for a variety of shooting conditions. The iXA system employs a wide choice of Schneider-Kreuznach lenses, including 28mm, 55mm, 80mm, 110mm, 150mm and 240mm versions. The lenses are equipped with leaf shutters that work in combination with the camera's focal plane shutter. By using a specially designed secure lens holder, Phase One iXA can optimise the stability of the calibration data and enable quick changing of lenses without a recalibration.

In the last 12 months, resellers in major markets have started promoting, selling and supporting customers working with Phase One Industrial products through the company's worldwide network. Having local experts to talk with about technical issues, in their own language, is a distinct advantage for users, especially when on-the-spot support is given when needed.

### High-resolution solutions

Today's industry needs information much faster and at a higher quality than previously. With the possibilities available through the internet, satellite communication and other new data-transfer solutions, information has moved to a more sophisticated level than ever before, with

demands for higher-resolution images at reasonable prices.

In addition, changing regulations are enabling the use of UAVs in areas and roles that previously were only dreamed of. Over the next three to five years, the expectations are that new policies will allow the use of UAVs for up to 80% of all possible missions, thus greatly increasing the importance of high-resolution solutions for the UAV market. Moving beyond today's limitations, the advent of a small, rugged and light 80MP medium-format iXA camera is becoming an integral part of UAV use as payloads increase and demand for images continues to grow in sectors such as open mining, railways and utilities. The lower operational costs and specific applications make UAVs equipped with medium-format aerial cameras the natural choice for areas where manned flights are either too expensive, too dangerous or impractical.

## **The future**

Phase One Industrial continues to work with experts and engineers in the aerial market to develop solutions for the exacting needs of aerial photogrammetry. With a dedicated worldwide staff of engineers, programmers and highly skilled technicians, Phase One is constantly examining ways to streamline the entire capture and processing workflow so that users can benefit from changes in technology. As in the past, Phase One will strive to remain at the cutting edge and introduce new and innovative advances to its aerial photography system.

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