

# Ultra HD Photographic Inspection Services

There is a frequent need, in a wide range of sectors, to perform inspections of difficult-to-access installations. Methods of reaching these areas requiring inspection have traditionally been extremely high-risk. It is now possible to carry out many of these inspections from the safety of the ground using high-definition photography, but when important decisions need to be made on the basis of photographs, a clear and accurate image is a prerequisite.



## THE Applus+ SOLUTION

Applus+ prides itself on having some of the most powerful cameras and highest-clarity lenses available on the professional market today. With this exceptional equipment, we offer our customers the opportunity to perform photographic inspections from a great distance away, yet still retain exceptional clarity.

Applus+ utilises ultra-long-range camera lenses and professional-grade 50 megapixel camera bodies to take amazingly clear, well-defined images of assets that might be hundreds of metres away. We capture these high-resolution images in such a way as to

be able to stitch them together to form gigapixel image files. These gigapixel images produce a seamless, ultra-high-definition image that may consist of tens – if not hundreds – of individual images.

As such, an inspector and customer can review the asset as a single image, avoiding the need to review hundreds of photos separately. The user can zoom in and out of the stitched image without losing the sharpness of the raw data.

To illustrate the point, if this technology were used to collect images of a 120m (400 foot) communication tower, a user could subsequently zoom in on the resulting stitched image and see the thread on the end of a bolt at the very top of the tower in perfect clarity. In fact, the technology can be pushed even further – we could count the number of threads on a bolt at the top of a 300m (1000 foot) chimney that was photographed from the ground.

Ultra-high-definition technology can be used to photograph anything, irrespective of its shape and size, and is an extremely cost-effective, safe and efficient way of inspecting large and complex assets.

## Target customers

Photographic technology is now being used extensively in many industries, for example in inspections of:

- Large communication towers
- Large vessels or tanks
- Bridges
- Flare towers (surveys from the flare tip all the way down to the base)
- The external surfaces of buildings (deterioration surveys)
- Large wind-turbine blades

## Key customer benefits

Applus+ ultra-HD photographic inspections offer countless obvious benefits to numerous industries.

First and foremost, they can dramatically reduce the risk profile of a job by substituting in a safe, ground-based methodology for existing high-risk methodologies.

Our remote-access methods can also dramatically reduce costs as only a small inspection team is required, with minimal equipment and very short set-up times. The equipment is small and lightweight and can be transported anywhere – including offshore – as helicopter freight.



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Applus+ can capture 100% of an asset's condition, with the photographs creating a record of the condition of a structure at a given point in time, which can then be reviewed and compared against in future inspections. This highly detailed photography can also be used for future asset planning, modification, expansion or maintenance work.

Due to the fast, cost-effective nature of Applus+ methodologies, clients no longer need only to perform sample inspections of assets as this technology can easily provide 100% coverage surveys rapidly, while keeping costs to a minimum.