

# Visual Intelligence Measuring the World in Ultra-High Definition

## The Drone/Robotics and Mobile 3D Imaging Market is Accelerating Beyond Imagination

Images taken from drones and handheld devices must evolve from a “happy snap” into measurable and content rich data, for 3D modeling, robotics, AR and VR. Achieving ultra-high definition engineering grade accuracy is the **NEXT BIG THING** for consumer cameras and sensors to go *extreme*; enabling drones and PDA’s to become the primary sensors for future real reality content.

### EXTREME TECHNOLOGY.

- Visual Intelligence’s (VI) iOne STKA® sensor software development platform technology turns a crossed-eyed array of cameras into a wide field imager with metric accuracy for 3D modeling while packing more pixels at higher resolution/definition in a smaller envelope. A 3D digital ruler.

**Result:** Leverages metricity, a set of patented technologies embodied by software that transform/integrates inexpensive electronics and components into “beyond state of the art 3D metric sensing” – precision super sensor instruments – all without increasing the cost of the system.

### EXTREME OPPORTUNITIES.

iOne STKA® array-based sensors can collect images much larger than the next generation of mobile phones and denser point clouds (10-20x than current LiDAR 3D models) to generate measurable 3D objects of unprecedented accuracy; enabling essential content for large market segments including:

- CAD, BIM, and Consumer Purchasing with ability to measure objects to high accuracy for engineering quality 2D and 3D models.
- AR/VR applications by performing accurate registration of 3D data content.
- Construction and Oil & Gas asset management generating 3D models for commercial buildings, and large facilities revolutionizing AEC practices.
- Security, Sports, and Mapping applications using wide-field image capture producing coverage for persistent surveillance, new ways to visualize events in 3D, and reduce data capture costs.
- Real estate appraisers and insurance adjusters needing high-quality consumer camera modules for rooftop analysis and cost estimating.

### EXTREME IMAGERY.

With the iOne STKA® software foundation developers can integrate cameras and sensors arrays such that it enables the:

- Collection of large, ultra-high-resolution images that are engineering quality, measurable, and positionally accurate to less than 1 pixel – even in outdoor light; enabling metric performance in technologies such as Intel’s RealSense and 3D Robotics.
- Collection and fusion (co-registration) of different data types at once (e.g. near-infrared, thermal, laser, time of flight); producing imagery that is packed with the kind of detailed data that the pros demand.
- Use of calibrated consumer camera modules to take accurate measurements from the ground or air and produce professional quality imagery collected faster than is available today.

### EXTREME CONTENT POSSIBILITIES.

iOne STKA® based sensors collect sensor fused wide-range content using LiDAR, IR, thermal, spectral and other passive/active sensors. Collect oblique and 3D image content in a format readily useable by present and future AV/VR devices and while of the highest “happy snap” UHD quality, can be used for engineering mapping and modeling, robotics, metric VR/AR and much more.

iOne STKA® - one software architecture to empower endless vertical content applications- *indeed imagination is the limit!*

About us: Visual Intelligence’s industry-leading software and sensor technology is backed by a rich history of industry innovations, numerous patents, the USGS Digital Aerial Sensor Type Certification, the 2013 Geospatial Forum World Technology Innovation in Sensors Award, and Technology Innovation and Grand Awards in the 2014 MAPPS Geospatial Product and Services Excellence competition. This document may contain forward-looking statements. Actual results could differ materially from these forward-looking statements, and many factors, including market and economic conditions, could change anticipated results.

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### ***iOne STKA® Extreme Technology – Our Value***

***Bigger and Faster 3D Imaging*** – Using a cross-eyed array gives you a wider field view which means the image size is larger and collected 2-3 times faster; saving collection and processing time.

***3D Engineering Metric Accuracy Unprecedented engineering metric quality and accuracy at the cost of a “happy snap” empowers applications for engineering, AR, VR and robotics. A Real Reality Cam Geomapping the World Online!***

***Accurate 3D Measurements*** – The creation of measurable 3D images opens up opportunities to measure interiors for renovations, augmented reality and many other to be imagined apps.

***The Power of Array Fusion*** – Co-mounting and Co-registering different sensor types at the same time, such as infrared, laser and thermal adds valuable information that can be synched with video or sensors empowering applications where imagination is the limit.

***3D Imagery for BIM, AR/VR, Building Analysis and Estimating apps among others.***



Visual Intelligence – Collect More. Do More. For Less.  
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