VisionMap and Bentley Systems have joined to create 3D Edge, a state-of-the-art 3D modeling solution for creating high quality 3D city models, quickly and at low cost.

3D Edge is the fastest, most cost-effective end-to-end 3D modeling solution on the market.

**Vast Areas. Fast Processing. Astonishing Detail.**
A3 Edge Aerial Survey

The 3D Edge solution begins with VisionMap’s A3 Edge Digital Mapping Camera, which collects high resolution oblique and vertical imagery simultaneously, at record-breaking speed.

The camera’s productivity vastly exceeds other commercial oblique cameras, allowing for the creation of 3D models of vast areas. For cities with aviation traffic restrictions, A3 Edge is the only camera to provide the high resolution needed for 3D modeling.

A3 LightSpeed Automatic Processing

Thanks to LightSpeed, A3 Edge provides simultaneous adjustment of vertical and oblique images. LightSpeed’s high photogrammetric accuracy and large number of overlaps yields an end-product of the highest quality.

3D Model Creation

The processed A3 Edge imagery is then exported into Bentley Systems Smart3DCapture™ software, which automatically creates a stunning high resolution, photo-textured 3D model. Smart3DCapture™ is extremely efficient, processing an average of 7-11 gigapixels/day/engine, depending on the hardware configuration.

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A3 Model of Jerusalem

A 3D model of Jerusalem was created from an aerial survey at 6,500 ft. AGL, collecting a resolution of 6-8 cm GSD.

The area surveyed was 2 km².

The entire process from flight to final 3D model took three days, running on one engine.

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VisionMap’s A3 Edge can be used for both 3D city modelling and mapping.

Aerial Survey Productivity for 3D City Modeling

<table>
<thead>
<tr>
<th>GSD (cm)</th>
<th>5.00</th>
<th>10.00</th>
<th>15.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net coverage for 3D city model production (km²/h)</td>
<td>30</td>
<td>80</td>
<td>110</td>
</tr>
</tbody>
</table>

* 55% forward overlap, 70-80% side overlap
** Net coverage is calculated for a cross-directional flight of an area of 10x10 km, including turns between flight lines

A3 LightSpeed Processing Productivity

<table>
<thead>
<tr>
<th>GSD (cm)</th>
<th>5.00</th>
<th>10.00</th>
<th>15.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT (km²/24 hours)</td>
<td>500</td>
<td>2,000</td>
<td>4,500</td>
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</table>