

## VISION STAKEOUT & SURVEY

**FULL-STAR**

**AUTO-IMU**



## MEASURE WHAT YOU SEE

The Benchmark F8 seamlessly integrates cutting-edge VISION, GNSS, and IMU technologies to meet the needs of professional surveyors. It offers unparalleled accuracy and efficiency for demanding surveying tasks.

With dual-camera integration, the F8's advanced vision system helps surveyors overcome obstacles and tackle challenging terrain, including difficult-to-fix, hard-to-reach, and hazardous points. Real-time visual feedback enables precise stakeout without the need for complex offset methods, improving both efficiency and accuracy.

By leveraging the Benchmark F8, surveyors can streamline their workflow, boost productivity, and achieve outstanding results on every project.

### FULL CONSTELLATION SUPPORT AND ADVANCED RTK ENGINE: RTK SIGNAL BOOSTED BY 60%!

- ▶ 1608 signal channels and advanced Full-Star algorithm to track full constellation and frequencies.
- ▶ High-efficiency SoC provides a 60% increase in processing speed.

### EFFORTLESS AR VISION NAVIGATION + VISION STAKEOUT

- ▶ Convenient AR vision navigation with large arrows and accurate real-time distance indication.
- ▶ Immersive AR Visual Stakeout to vividly display ground stakeout points in the eField software, increasing efficiency by 50%.

### VISION SURVEY: ACCURATELY MEASURE COMPLEX SCENES IN REAL-TIME

- ▶ Easily obtain high-precision 3D coordinates from real-time video, enabling accurate measurements of challenging scenes, including signal-obscured, hard-to-reach and hazardous points.
- ▶ High-speed dynamic panoramic shooting, high-quality and distortion-free image capture, automated image matching with up to 85% overlap rate.

### EFFICIENT 3D MODELING FROM FIELD TO OFFICE

- ▶ Capture POS photos with F8's Vision Survey for both individual building modeling and collaborative modeling with drones to complement aerial surveys.
- ▶ Seamlessly integrate F8's engineering data into industry-standard software such as ContextCapture for 3D modeling.

### FULLY INTEGRATED GNSS AND 4D AUTO-IMU

- ▶ Automatic 4D IMU initialization during motion eliminates initialization thresholds.
- ▶ Maintain IMU initialization throughout field operations to ensure continuous accuracy.

### eField: EMPOWER ENGINEERING & CONSTRUCTION PROFESSIONALS

- ▶ Effortless stakeout with automatic rotation of the CAD base map based on the surveyor's perspective.
- ▶ Smooth handling of large CAD drawings for efficient graphical operations.
- ▶ Optimize Triangulated Irregular Networks (TIN) for accurate earthwork calculations using advanced filtering techniques.
- ▶ Simplify road stakeout with graphical representation of cut-fill values imported via LandXML.