

# RTK LASER MAPPING WITH COLLECTOR FOR ARCGIS®

## High-Accuracy Mapping Where RTK Does Not Work

The need for real-time, high-accuracy GNSS positioning is growing. Regulatory requirements on spatial data accuracy is increasing and within some industries, nothing less than the utmost precision is acceptable. Collecting highly accurate horizontal and vertical data is achievable in some areas, but what about all the places where RTK doesn't work? Now there is a solution: Welcome to RTK laser mapping!

## The Power of Three

Achieve RTK-level accuracy in unfriendly environments on assets located in alleyways, under trees and even in the middle of a busy street with a combination of hardware and apps from the leaders in the industry.

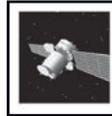
 **esri** The leaders in GIS software for the field and office

The leaders in high-accuracy GNSS receivers for BYOD



 **LASER TECHNOLOGY** The leaders in high-accuracy laser rangefinders and encoders

## Industry Terms

 **GNSS (Global Navigation Satellite System)**  
Includes GPS and all global constellations such as Glonass, Galileo and BeiDou.

 **LTI Laser Rangefinder**  
Professional-grade, highly accurate, point-and-shoot handheld laser measurement device

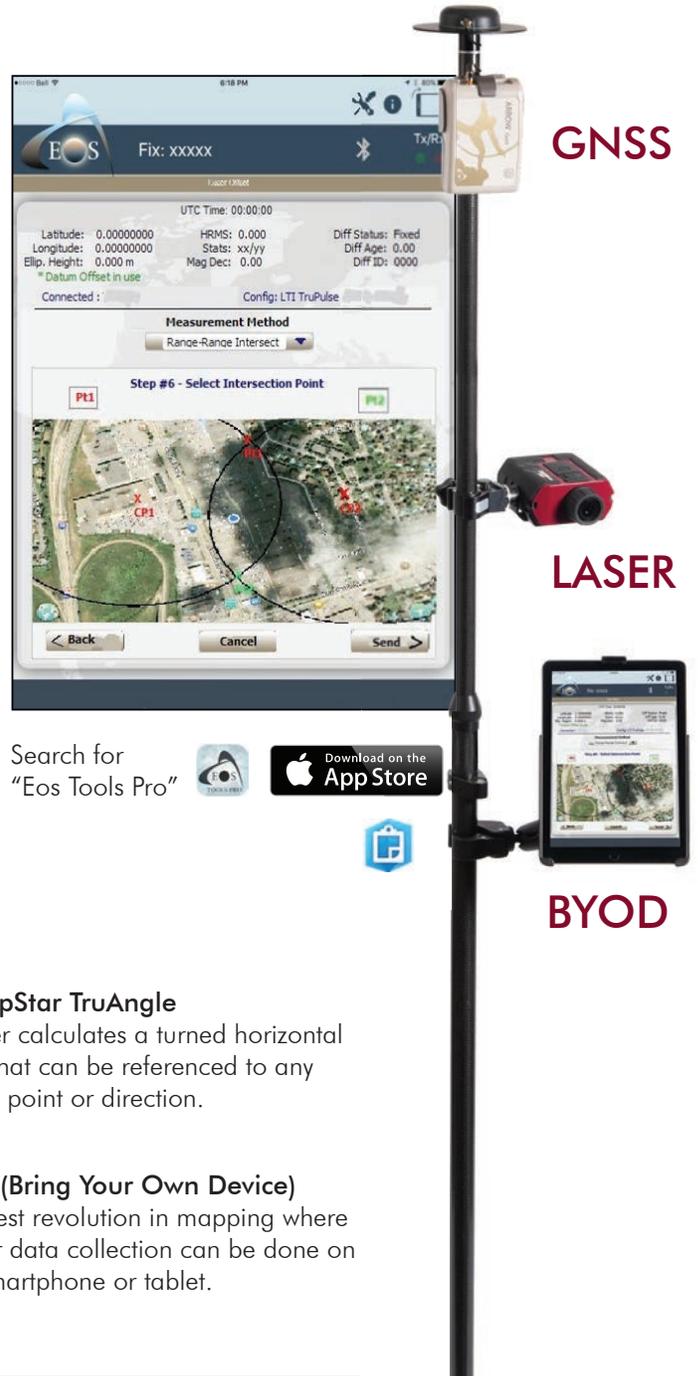
 **RTK (Real-Time Kinematic)**  
Real-time, cm-level GNSS positioning using an RTK base or network



**LTI MapStar TruAngle**  
Encoder calculates a turned horizontal angle that can be referenced to any desired point or direction.



**BYOD (Bring Your Own Device)**  
The latest revolution in mapping where all your data collection can be done on your smartphone or tablet.



**GNSS**

**LASER**

**BYOD**

Search for "Eos Tools Pro"  



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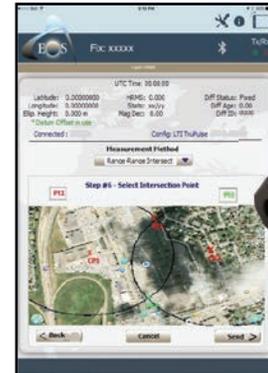
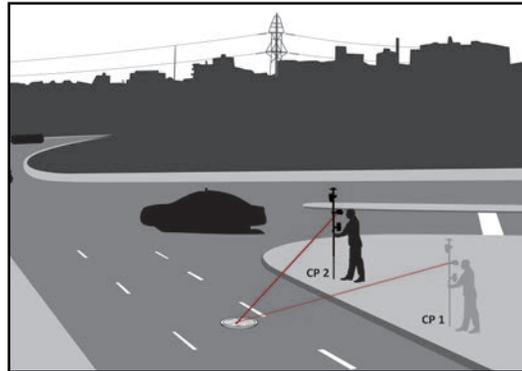
## Laser Mapping Workflows

The type of LTI laser you choose to pair up with Eos' GNSS device will depend upon how you collect remote position data of features you cannot occupy. Below are three laser workflows, available using Eos' Tools Pro app, that seamlessly integrate with Esri's Collector.

### Range-Range

LTI Laser: TruPulse 200X  
Eos/Collector Workflow Steps:

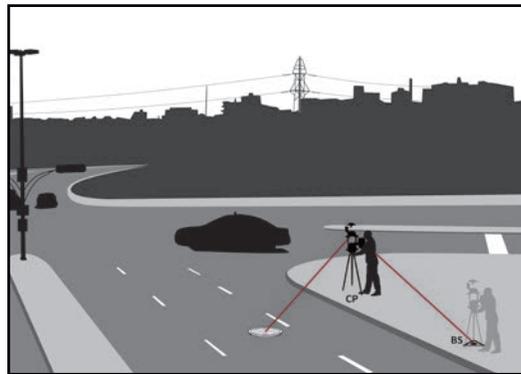
1. Occupy CP1 in safe area and position it with GNSS
2. Aim and shoot remote feature
3. Occupy CP2 in a safe area and position it with GNSS
4. Aim and shoot to remote feature



### Range-Backsite

LTI Laser: TruPulse 200X + TruAngle  
Eos/Collector Workflow Steps:

1. Occupy BS point and record your position with GNSS
2. Occupy CP2 and record your position with GNSS
3. Aim and shoot position to BS
4. Aim and shoot to remote feature



### Range-Azimuth

LTI Laser: TruPulse 360/R  
Eos/Collector Workflow Steps:

1. Locate yourself in a safe area
2. Record your position with GNSS
3. Aim and shoot
4. Manually enter

