

# **PRODUCT SOLUTIONS**

TruPulse® Laser Rangefinders TruPoint™ Laser Rangefinders MapStar® TruAngle® Measure Distance, Inclination, Azimuth, Horizontal, and Vertical Angles Height & Width, Slope, and Missing Line

PROFESSIONAL MEASUREMENT





LTI's dedication to high quality and unmatched innovation has allowed our products to be used for a wide range of professional field measurement applications: from measuring distances, height or slope values, to calculating a remote offset position with GNSS.



# TRUPULSE® LASER RANGEFINDERS

Withstands the test of time and has been revamped to offer new enhancements and improvements. These highly sophisticated and easy-to-operate laser rangefinders use our core, reflectorless technology with TruTargeting performance built-in to every unit. They offer the user a choice of four targeting modes and displays all data values right inside the sighting scope.



#### TruPulse<sup>®</sup> 200L

- Produces good distance and inclination accuracy
- Flexible Height and 2D Missing Line routines
- Easy-to-use, icon driven display

### Laser Rangefinder Targeting Modes



#### TRUPULSE<sup>®</sup> 200

- Produces better distance and inclination accuracy
- Increased scope magnification and field of view
- Transfers data via serial port or with Bluetooth<sup>®</sup> wireless technology
- Closest: distinguishes near and far objects and identifies the closet target
- Farthest: distinguishes near and far objects and identifies the farthest target



#### TRUPULSE<sup>®</sup> 200X

- Achieves the highest distance and inclination accuracy
- Offers adjustable LED display brightness
- Withstands conditions with rugged, waterproof housing
- Continuous: provides constant updates while shooting multiple targets
- Filter: measures through dense foliage by recognizing only a highly reflective target

#### APPLICATIONS



#### ELECTRIC UTILITIES

➢ Span, Sag, and Tension
➢ GIS Mapping
➢ Vegetation Management
➢ Pole Inventory



#### TELECOMMUNICATION

- Site Inspection
- Antenna Height
- Obstruction Mapping
- Material Estimate



#### FORESTRY

- ▹ Tree Heights
- Slope Grades
- Stem Mapping Surveys
- Ecosystem Management

# **3D LASERS** + HORIZONTAL, ANGLES, AZIMUTH

### TruPulse<sup>®</sup> 360° & 360° R

- $\triangleright$  Provides full AZ + INC + SD measurement capability
- Solves 3D missing line calculations between two remote points
- Integrates with GPS/GNSS for efficient GIS data capture





TRUPULSE<sup>®</sup> 360°

TRUPULSE<sup>®</sup> 360° R



## TruPulse<sup>®</sup> 200X + MapStar<sup>®</sup> TruAngle<sup>®</sup>

- > System measures distance, inclination, and horizontal angle values with the capability to capture X,Y, and Z coordinates for 3D mapping
- > Bluetooth<sup>®</sup> Encoder Loop feature eliminates a cable by adding the horizontal angle measurement to the laser's data string
- Provides needed functionality and accuracy at an affordable price



### TruPoint<sup>™</sup> 300

The TruPoint 300 is a small, lightweight and compact total station ideal for use in applications such as Construction, BIM, Pole Audit, Indoor Stockpile, and many more.

- Measures distance, inclination, and horizontal angles for X, Y, Z measurements
- Obtains missing line measurements using on-board routines
- Operates easily with step-by-step icons and a color display screen
- Provides high quality, accurate, easy-to-see targets with 4X zoom camera

# **MEASUREMENT** SOLUTIONS

**SD** = SLOPE DISTANCE

HD = HORIZONTAL DISTANCEML = MISSING LINEAZ = AZIMUTH

INC = INCLINATION

**HT** = HEIGHT VD = VERTICAL DISTANCE

Calculated by TruPulse -----





Measured by TruPulse





#### CONSTRUCTION

Stockpile Volumes Site Inspection Crane Positioning Face Profiling



#### **PUBLIC WORKS**

Asset Inventory

Land Use Planning Facility Mapping

**Emergency Response** 



#### **GIS MAPPING**

- Remote Offset Locations
- Site Inspection
- Wetland Mapping/Delineation
- Natural Resources

PRODUCT SPECIFICATIONS

2D LASERS	TruPulse <sup>®</sup> 200L	TruPulse <sup>®</sup> 200	TruPulse <sup>®</sup> 200X	TruPoint™ 200h
Distance Accuracy to Typical Targets	± 0.5 m (1.6 ft)	$\pm$ 0.2 m (8 in)	± 4 cm (1.5 in)	Pulse ± 2-4 cm (0.8 – 1.5 in) Phase: ± 1.5 mm (0.05 in)
Max Range to Reflective Targets	1750 m (5,740 ft)	2000 m (6,560 ft)	2500 m (8,200 ft)	<b>Pulse</b> : 500 m (1,640 ft) <b>Phase</b> : 100 m (328 ft)
Inclination Accuracy	$\pm$ 0.5° Relative	± 0.25° Typical	± 0.1° Typical	± 0.1° Typical
Wireless Communication / App Compatibility	No	Windows® + Android®	Windows® + iOS + Android®	Bluetooth® Classic & BLE
Scope Magnification / In-Scope Display Type	4X/LCD	7X/LCD	7X/LED	2X/LED

3D LASERS	TruPulse <sup>®</sup> 360°	TruPulse <sup>®</sup> 360° R	TruPulse <sup>®</sup> 200X & MapStar <sup>®</sup> TruAngle <sup>®</sup>	TruPoint™ 300
Measures Azimuth with TruVector Compass Technology	Yes	Yes	No	No
Distance Accuracy to Typical Targets	$\pm$ 0.2 m (8 in)	$\pm$ 0.2 m (8 in)	± 4 cm (1.5 in)	± 1 mm (0.04 in)
Max Range to Reflective Targets	2000 m (6,560 ft)	2000 m (6,560 ft)	2500 m (8,200 ft)	0.05 up to 300 m (0.16 to 1000 ft)
Inclination Accuracy	$\pm$ 0.25° Typical	$\pm$ 0.25° Typical	± 0.1° Typical	± - 0.1° Typical
Angle Accuracy	N/A	N/A	Horizontal +/- 0.1°	+/- 0.1° Horizontal and Vertical
Azimuth Accuracy	+/- 0.5° RMS; Typical	+/- 0.5° RMS; Typical	N/A	N/A
Wireless Comm / App compatibility	$Windows^{\texttt{®}} + Android^{\texttt{®}}$	$Windows^{\texttt{B}} + Android^{\texttt{B}}$	Windows® + Android® + iOS	Bluetooth® Smart, WLAN
Scope Magnification / In-Scope Display Type	7X/LCD	7X/LCD	7X/LCD	Point finder with 4x zoom camera and red-dot laser

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