Topcon Millimeter GPS®

Precision elevation achieved

Smart Vertical Accuracy Millimeter GPS[®] is the unique solution Simple setup for remarkable efficiency





Fine grading with motor graders





±0.000m ±0.001m ★0.0000.00%

TOPCON



Tight vertical tolerances -Millimeter GPS[®] delivers

Millimeter GPS[®] combines proven GNSS positioning and Lazer Zone[®] technologies to achieve high accuracy elevations with GNSS horizontal flexibility. Operators utilizing the MC-Max machine control system can visually locate the machine on the jobsite, understand the positioning of the machine and place material accurately and with ease through automation.

No more batter rails, stringlines or sprayed numbers on the ground

Unlike a standard rotating laser, which is primarily utilized for flat or sloping planes and loses accuracy over long distances, the Lazer Zone[®] transmitter can cover nearly 1000 feet horizontally and 30 feet vertically with millimeter accuracy. Combine transmitters to cover nearly 4000 horizontal feet for even more coverage.

- » High-accuracy grade reference covers the entire project and multiple machines and grade checkers
- » Combine up to 4 lasers to extend your project limits

How does it work

Utilizing a Lazer Zone[®] receiver and a GNSS antenna, the rover or machine acquires the Lazer Zone[®] transmitter's signal, decodes the information and establishes a precise, millimeter level, vertical position anywhere on the jobsite. With no limit to the number of receivers used, Lazer Zone[®] is the perfect tool for establishing grade, grade verification and material placement.

Millimeter GPS® (mmGPS)

Local Positioning System (LPS)

Positioning				
Horizontal	GNSS	Total station		
Vertical	Zone Laser	Total station		
Control requirements				
Horizontal	GNSS-accuracy	Traverse		
Vertical	Leveled	Leveled		
Recommended range (horizontal/vertical, feet)				

Earthmoving	900/30 (with 4 laser: 3600/120)	900/70	
Road Construction	400/20 (with 4 laser: 1600/80)	400/40	
Number of devices1 Lazer Zone® transmitter for all machinesin working rangeand grade checkers		1 Total station per machine/grade checker	

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