

## Leica Viva TS12 Robotic



Year of Purchase: 2018

Cost: 51 Lac

### Performance

Leica Viva TS12 1" R1000 Total Station Performance Robotic package sets a new standard. Everything you need is in one package to begin efficient surveying today. Leica Viva TS12 is packed with features, such as the unique PowerSearch sensor which finds prisms regardless of their location in seconds and the light weight Leica CS10 controller which provides secure wireless connectivity to the total station. Together with the easy-to-use Leica SmartWorx Viva software, robotic surveying has never been so easy and productive.

### Best-in-class Search-Lock-Measure

Leica Viva TS12 uses years of experience to optimally find, lock and measure to prisms with a single key press. With the unique PowerSearch sensor any prism type is found within seconds regardless of location.

Your benefit the fastest robotic total station in its class.

### Best in class Radio field Controller

The ergonomic and light weight Leica CS10 Radio field controller with the fully integrated Intenna technology offers a long range, secure and fast wireless connectivity to your TS12 total station.

SmartWorx Viva LT is designed with simplicity in mind using clear graphics, logical menu structures, non technical terminology and simplified workflows.

### Specifications

Feature	Specifications
Angular Measurement	
Accuracy Hz, V 1	1" (0.3mgon) 2" (0.6 mgon), 3" (1 mgon), 7" (2 mgon)
Display resolution	0.1" (0.1 mgon)
Method	absolute, continuous, diametrical
Compensation	Quadruple axis compensation
Compensator setting accuracy	0.5" (0.2 mgon), 1.0" (0.3 mgon), 1.5" (0.5 mgon)
Distance Measurement (Prism)	
Round prism (GPR1)	3500 m (12000 ft)
360° prism (GRZ4, GRZ122)	3500 m (12000 ft)
Mini prism (GMP101)	2000 m (7000 ft)
Accuracy/ Measurement Time	
Standard	1 mm + 1.5 ppm / 2.4 s

Tracking	3 mm + 1.5 ppm / <0.15s
Distance Measurement (Non-Prism)	
PinPoint R400	400 m (1310 ft)
Accuracy/ Measurement Time	2 mm + 2 ppm / typ. 3 s
Display resolution	0.1 mm
Laser dot size (Non-Prism)	At 30 m: 7 mm x 10 mm, at 50 m: 8 mm x 20 mm
Telescope	
Magnification	30 x
Free objective aperture	40 mm
Field of view	1°30' (1.66 gon) / 2.7 m at 100 m
Display / Keyboard	1/4 VGA (320*240 px), color, illumination, touch screen / 28 keys
Sensitivity of Circular Level	6' / 2 mm
Centering accuracy of Laser plummet	1.5 mm at 1.5 m
Internal Battery / Voltage / Capacity / Operating Time	Lithium Ion / 7.4V / 4.4Ah / 5 – 8 h (GEB221)
Weight of Total Station / Battery GEB221 / Tribrach GDF121	4.8 – 5.5 kg / 0.2 kg / 0.8 kg
Working / Storage temperature range	-20° C to +50° C / -40° C to +70° C
Dust / water (IEC 60529) / Humidity	IP54 / 95%, non-condensing
Working Range	5 – 150 m
Positioning accuracy	5 cm at 100 m
Rotation speed	45° (50 gon) / s
Automatic Target Aiming (ATR)	
Round prism (GPR1)	1000 m (3300 ft)
360° prism (GRZ4, GRZ122)	800 m (2600 ft)
Mini prism (GMP101)	500 m (1600 ft)
Shortest measuring distance to 360° prism	1.5 m
ATR angle accuracy Hz, V	1" (0.3 mgon)
Measurement Time for GPR1	3 – 4 s
Maximum speed (Lock Mode) Tangential (standard mode)	5 m / s at 20 m, 25 m / s at 100 m
Radial (tracking mode)	5 m / s
Definable search windows / Search time in field of view	Yes / Typ. 1.5 s
Power Search (PS)	
Round prism (GPR1)	300 m (1000 ft)
360° reflector7 (GRZ4, GRZ122)	300 m (1000 ft)
Mini prism (GMP101)	100 m (330 ft)
Shortest distance	1.5 m
Typical search time	5 – 10 s
Definable search windows / Default search area	Yes / Hz: 360° (400 gon), V: 36° (40 gon)