Leica TS13

Data sheet





Upgradable

The Leica TS13 total station provides a fast, reliable and efficient solution tailored to the users needs to measure and layout more points. Equipped with Automatic Target Recognition (ATR) technology and optionally with target lock and SpeedSearch to find and lock on to prisms quickly, it provides accurate measuring to targets. Combined with Leica Captivate field software, the TS13 offers a simple and productive way of coding and line work.



Bridging the field to the office

The TS13 works with the revolutionary Leica Captivate field software, turning complex data into the most realistic and workable 3D models. It spans industries and applications with little more than a simple swipe, regardless of whether you work with GNSS, total stations or both. A smooth data transfer ensures the project stays on track. Captivate and Leica Infinity office software work in conjunction to join previous survey data and edit projects faster and more efficiently.

ACC»

Customer care you can rely on

Through Active Customer Care (ACC), a global network of experienced professionals is only a click away to expertly guide you through any problem. Eliminate delays with superior technical service, finish jobs faster with excellent consultancy support, and avoid costly site revisits with online service to send and receive data directly from the field. Control your costs with a tailored Customer Care Package, giving you peace of mind, you're covered anywhere, anytime.













Leica TS13 Total Station

Basic variant



| ANGULAR MEASUREMENT | | |
|---------------------------------|--|---|
| Accuracy ¹ Hz and V | Absolute, continuous, diametrical | 1" (0.3 mgon), 2" (0.6 mgon) 3" (1 mgon), 5" (1.5 mgon) |
| DISTANCE MEASUREMENT | | |
| Range ² | Prism (GPR1, GPH1P) ³ Non-Prism / Any surface ⁴ | 1.5 m to 3500 m R500: 1.5 m to >500 m, R1000: 1.5 m to >1000 m |
| Accuracy / Measurement time | Single (prism) ^{2,5} Single (any surface) ^{2,4,5,6} | 1 mm + 1.5 ppm / Typically 2.4 s 2 mm + 2 ppm / Typically 3 s |
| Laser dot size | At 50 m | 8 mm x 20 mm |
| Measurement technology | System analyser | Coaxial, visible red laser |
| AUTOMATIC AIMING - ATR | | |
| Target aiming range² | Circular prism (GPR1, GPH1P) 360° prism (GRZ4, GRZ122) | 1000 m 800 m |
| Accuracy 1,2 / Measurement time | ATR angle accuracy Hz, V | 1" (0.3 mgon), 2" (0.6 mgon), 3" (1 mgon), 5" (1.5 mgon) / Typically 3-4 s |
| GUIDE LIGHT (EGL) | | |
| Working range / Accuracy | | 5 - 150 m / Typically 5 cm @ 100 m |
| GENERAL | | |
| Processor | TI OMAP4430 1GHz Dual-core ARM® Cortex™ A9 MPCore™ | Operating system – Windows® EC7 |
| Power management | Exchangeable Lithium-Ion battery | Operating time 8 - 10 h |
| Field software | Leica Captivate incl. apps | Running on field controller (Leica CS20) |
| Data storage | Internal memory 2 GB SD card 1 GB or 8 GB | On field controller (Leica CS20) |
| Interfaces | RS232, USB, Bluetooth®, WLAN | |
| Weight | Total station including battery | 5.0 kg |
| Environmental specifications | Working temperature range Dust / Water (IEC 60529) / Humidity | -20°C to +50°C IP55 / 95%, non-condensing |
| Keyboard | Face I standard | 4 button keyboard with status LEDs |

Upgrades⁷



| KEYBOARD DISPLAY UNIT (Optional | al) | |
|--|---|---|
| Keyboard with display | Face I and face II optional | 5" (inch), WVGA, colour, touch 25 keys, illumination |
| Power management | Exchangeable Lithium-lon battery | Operating time 6 - 8 h |
| Field software | Leica Captivate including apps | Running on TS13 instrument |
| Data storage | Internal memory 2 GB SD card 1 GB or 8 GB | On TS13 instrument |
| Weight | Total station including battery | 5.3 kg |
| TARGET LOCK (Optional) | | |
| Target locking range ² | Circular prism (GPR1, GPH1P) 360° prism (GRZ4, GRZ122) | 800 m 600 m |
| ROBOTIC SURVEYING including PRI | SM FAST SEARCH (Optional) | |
| SpeedSearch range / Search time | 360° prism (GRZ4, GRZ122) | 300 m / Typically 7 s |
| Robotic range with long-range Bluetooth® 8 | To CS20 internal long-range Bluetooth® To CTR20 expansion pack | 500 m 1000 m |

- Standard deviation ISO 17123-3
 Overcast, no haze, visibility about 40 km, no heat shimmer
- 3 1.5 m to 2000 m for 360° prisms (GR24, GR2122)
 4 Object in shade, sky overcast, Kodak Gray Card (90% reflective)
- ⁵ Standard deviation ISO 17123-4
- Distance > 500 m: Accuracy 4 mm + 2 ppm, Measurement time typically 6 s
- Initial or after sales, independent from each other
 Under good radio conditions

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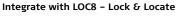


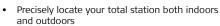
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Leica Geosystems AG

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- Get location updates as frequently as once every
- At the click of a button, remotely lock and unlock your total station directly from your mobile device or computer
- Get alerts when your total station is on the move from a pre-defined geo-fenced area

For more information visit: leica-geosystems.com/LOC8

