

Leica TS20

TS20 er totalstationen, der sætter standarden for produktivitet og præcision i hverdagens landmålingsopgaver. Unik AI-baseret automatisering, IP66-klassificeret beskyttelse og problemfrie forbindelsesmuligheder sikrer enestående ydeevne uafhængigt af forholdene. Kombineret med en optimeret brugeroplevelse og gennemprøvet kvalitet fra Leica Geosystems sætter TS20 landmålere i stand til at mestre deres måle- og afsætningsopgaver.



Vær klar til enhver opmåling med Leica TS20 totalstationen

- Klar til alle typer af måleopgaver og anvendelser udført af en eller to personer.
- Forbedret automatisering til hurtigere opsætning samt fleksibel og præcis måling. AutoHeight, Leica AP20 AutoPole, PowerSearch, Dynamisk Lock og avanceret prisme genkendelse reducerer nedetid og fejltagelser.
- Bygget til alle vejrforhold. Det IP66-klassificeret design, AI-baseret ATR og PowerSearch sikrer højeste ydeevne i udfordrende omgivelser.
- Real-time dataoverførsel med cloud-forbindelsesmuligheder. Den trådløse forbindelse til GeoCloud-tjenester understøtter gnidningsfrie arbejdsgange.
- Fremtidssikret med løbende softwareforbedringer og banebrydende hardware. TS20 tilpasser sig fremtidens behov og byder på langvarig værdi samt en ydeevne helt i top.

Angle measurement		
Accuracy ¹ Hz og 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	0,8 m to >10.000 m R800: 0,8 m to >800 m; LC2 R1600: 0,8 m to >1600 m; LC3R
Accuracy / Measurement time	Single (prism) ^{2,5} Single (any surface) ^{2,4,5,6}	1 mm + 1,0 ppm / typically 1,3 s 2 mm + 2,0 ppm / typically 1,7 s ⁶
Laser dot size	At 50 m	12 mm x 18 mm
Measurement technology	Wave Form Digitizer	Coaxial, visible red laser (658 nm)
Automatic aiming – ATR		
Target aiming range ² / Target locking range ²	Circular prism (GPR1, GH1P) 360° prism (GRZ4, GRZ122) Reflective tape (GZM37)	2000 m / 1000 m 1000 m / 1000 m 50 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
PowerSearch		
Range	Circular prism (GPR1, GH1P) 360° prism (GRZ4, GRZ122) 360° mini prism (GRZ101) Reflective tape (GZM37)	600 m 500 m 300 m 55 m
Motorisation		
Direct drives, BLDC technology	Rotation speed Time to change face	Maximum 200 gon (180°) / s Typically 1,9 s
AutoHeight		
	Distance accuracy 1,0 mm (1 sigma)	Distance range 0,7 m til 2,7 m
Imaging		
Overview camera	Sensor Angle of view Frame rate	20 MP CMOS 21.8° x 16.4° (27° diagonal) ≤ 20 frames per second
Guide light (EGL)		
Working range / Accuracy		5-150 m / typically 5 cm @ 100 m
Mobile connectivity (GMI01)		
Sensor and data services	Network: Integrated 4G LTE with eSIM support	
GeoCloud Protect	Theft protection service	Outdoor & indoor positioning (GNSS, WLAN, mobil), Battery life duration: up to 5 days
General		
Field software	Leica Captivate with apps	
Display and keyboard	5" WVGA colour display with multi-touch	37 keys, illumination
Processor	NXP I.MX 8M Plus, integrated Neural Processing Unit (NPU)	Operating system: Linux®
Autofocus telescope	Magnification 30x	Focus range 1,45 m to infinity
Power management	Exchangeable Lithium-Ion battery	Operating time up to 5 h
Data storage	Internal memory / Removable memory	32 GB / USB-C stick 16 GB
Interfaces	Ethernet, USB-C®, Bluetooth®, WLAN	
Weight	Total station Total station with tribach and battery	4,97 kg 6,03 kg
Environmental specifications	Working temperature range Dust / water (IEC 60529) Humidity (MIL-STD-810H Method 507.6.)	-20 °C (-35 °C Arctic version) to +50 °C IP66 100 %, non-condensing

Leica TS20 totalstationer	TS20 I	TS20 P	TS20 A
ATR	✓	✓	✓
Integrated LR-BT for field controller/tablet connection	✓	✓	✓
Direct drives	✓	✓	✓
PowerSearch	✓	✓	✗
Dynamic Lock	✓	✓	✗
Imaging	✓	✗	✗
AI-detect (Target type detection)	✓	✗	✗
Mobile connectivity (GMI01)	optional	optional	optional

¹ Standard deviation ISO 17123-3

² Overcast, no haze, visibility about 40 km, no heat shimmer

³ 0,8 m to 2000 m for 360° prisms (GRZ4, GRZ122)

⁴ Object in shade, sky overcast, Kodak Gray Card (90% reflective)

⁵ Standard deviation ISO 17123-4

⁶ Distance > 500 m: Accuracy 4 mm + 2 ppm, Measurement time typically 4 s

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Laser radiation, avoid direct eye exposure.
R1600 Class 3R laser product and R800
Class 2 laser product in accordance with
IEC 60825-1 (2014-05).