

SOKKIA

MADE TO FIT YOUR WORLD.

DTx40

Digital Theodolites





Common Features for All Models

- 2.5" – unsurpassed telescope resolving power*
- IP66 – industry's highest dust/water protection rating
- Absolute encoders
- Lightweight
- Standard LR6/AA batteries
- Up to 170 hours of operating time

* Except for DT940(L)

Exclusive Features for the Laser Models

- 200 m (660 ft.) – long-range laser pointer
- 0.4 mm at 10 m – ultra-small beam spot

Superior Performance and Durability

The Sokkia DT series theodolites feature superior optics, mechanics, advanced absolute encoder systems, and proven automatic compensators. In addition to these essential technologies for angle measurement instruments, the Sokkia DT series boasts the industry's highest IP66 dust and water protection rating that ensures the capability to withstand the harshest work site environments.

Power-Saving Technology to Save Battery Costs

Four LR6/AA alkaline batteries provide extra-long operating time from 100 to 170 hours, saving costs for replacement batteries. The DT instruments can operate for two to five weeks without changing batteries.*

* When used for seven hours a day, five days a week, excluding the use of laser pointers.

Laser Pointer to Increase Construction Work Efficiency*

The DT laser models feature built-in coaxial laser pointers that maximize construction work efficiency. The applications include:

- Layout / Setting-Out
- Horizontal / Vertical Alignment
- Leveling
- Grading
- Squaring

* *Laser models only*

Long-Range Laser with Ultra-Small Beam Spot (Laser Models)

The laser beam reaches 200 m (660 ft.) under indoor or underground conditions. Even under daylight conditions, the beam spot can be recognized at up to 50 m (164 ft.) away from the instrument. Red laser beam emitted from the objective lens is focused simultaneously with the telescope, meaning that the beam spot size becomes the minimum where you focus.



Beam Spot Size (when focused)

The laser beam sizes are theoretical values. The visible laser beam size will vary with ambient brightness.

Standard Accessories

- LR6/AA batteries (x4)
- Lens cap
- Plumb bob
- Tool kit
- Operator's manual
- Carry case



Model	Digital Theodolites				Laser Digital Theodolites			
	DT240	DT540	DT740	DT940	DT540L	DT740L	DT940L	
Laser Pointer								
Type	-				Coaxial laser pointer with beam focusing capability			
Laser specifications	-				Class 2, Wavelength: 633nm, Maximum output: 0.6mW			
Laser range (Daylight / Indoor 700 lux)	-				50m (164ft) / 200m (656ft)			
Telescope								
Length	149mm (5.9in.)				152mm (6.0in.)			
Objective aperture	45mm (1.8in.)		40mm (1.6in.)		45mm (1.8in.)	40mm (1.6in.)		
Magnification	30x		26x		30x	26x		
Resolving power	2.5"		3"		2.5"	3"		
Image / Field of view	Erect / 1°30' (26m/1,000m)							
Minimum focus	0.9m (3.0ft.)				1m (3.3ft.)			
Stadia	Multiplication constant: 100, Additive constant: 0							
Reticle illumination	Y	Y	Y	-	Y	Y	-	
Angle measurement								
Method	Absolute rotary encoder scanning							
Detecting	Horizontal	Diametrical		Single	Diametrical		Single	
	Vertical	Diametrical	Single					
Display resolutions	1" / 5" 0.2 / 1mgon		5" / 10" 1 / 2mgon		10" / 20" 2 / 5mgon	1" / 5" 0.2 / 1mgon	5" / 10" 1 / 2mgon	
Accuracy	2"	5"	7"	9"	5"	7"	9"	
Circle diameter	71mm (2.8in.)							
Automatic compensation range	±3'(±55mgon)		-		±3'(±55mgon)		-	
General								
Control panel layout	On both faces		On single face		On both faces		On single face	
Display	LCD, 7 digits x 2 lines, backlight							
Interface	RS-232C		-		RS-232C			
Optical plummet	Magnification: 3x, Field of view: 3°, Minimum focus: 0.5m (1.64ft.)							
Sensitivity of levels	Plate level	30"/2mm	40"/2mm	60"/2mm	40"/2mm	60"/2mm		
	Circular level	10'/2mm						
Tribrach	Detachable		Fixed		Detachable		Fixed	
Operating temperature	-20 to +50°C (-4 to +122°F)							
Dust and Water Protection	IP66 (IEC 60529:2001)							
Size (w/handle)	W188 x D149 x H313mm (W7.4 x D5.9 x H12.3in.)		W188 x D149 x H305mm (W7.4 x D5.9 x H12.0in.)		W188 x D152 x H313mm (W7.4 x D6.0 x H12.3in.)		W188 x D152 x H305mm (W7.4 x D6.0 x H12.0in.)	
Weight (w/batteries)	4.1kg (9.0 lb.)		3.5kg (7.7 lb.)		4.2kg (9.3 lb.)		3.6kg (7.9 lb.)	
Power supply								
Battery								
Operating time*	Theodolite only	Approx. 100 hrs	Approx. 140 hrs	Approx. 150 hrs	Approx. 170 hrs	Approx. 140 hrs	Approx. 150 hrs	
	Laser only	-				Approx. 80 hrs		
	Theodolite and laser	-				Approx. 45 hrs		

Your local Authorized Dealer is:

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Specifications subject to change without notice
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SOK-1019 Rev C 6/18