

DTx40 Digital Theodolites





DTx40 Series

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 the 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)

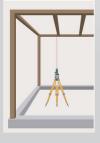
The laser beam sizes are theoretical values. The visible laser beam size will vary with ambient brightness.

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								
Туре		-				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′ (26						
Minimum focus		0.9m (3.0ft.)				1m (3.3ft.)		
Stadia				ultiplication	constant: 10	0, Additive cons	tant: 0	
Reticle illumination		Υ	Y	Y	-	Y	Y	-
Angle measuremer	it							
Method	Harinantal	<u> </u>	Absolute rotary encoder scanning Diametrical Single Diametri		-:!	Cinala		
Detecting	Horizontal Vertical	Diametri-			Diametrical Single Single			
Display resolutions		cal	. 5"	5" / 10"	10" / 20"	1" / 5"	5" / 10"	10" / 20"
		0.2 / 1		1 / 2mgon	2 / 5mgon	0.2 / 1mgon	1 / 2mgon	2 / 5mgon
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 li						
Interface		RS-232C –				RS-232C –		
Optical plummet						, Minimum focus: 0.5m (1.64ft.)		
Sensitivity of levels Plate level Circular level		30"/2mm					60"/2mm	
Tribrach		Detachable Fixed			Fixed	Detachable Fixed		
Operating temperature		-20 to +50°C (-						
Dust and Water Protection		IP66 (IEC 605						
Size (w/handle)					W188 x			1
		D149 x				l		W188 x D15
		W188 x D149 x H313mm H3			H305mm	W188 x D152 x H313mm		
		(W7.4 x D5.9 x H12.3in.) (W7.4			(W7.4 x D5.9			(W7.4 x D6.0
		x H12.0in.)						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					LR6/AA batte	1		
Operating time*	Theodolite	Approx.	Approx.	Approx.	Approx.	Approx.	Approx.	Approx.
	only	100 hrs 140 hrs 150 hrs		170 hrs	140 hrs 150 hrs		170 hrs	
	Laser only	-				Approx.80 hrs		



Theodolite

Get in touch today: **0800 867 000**

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Approx.45 hrs

www.positionpartners.co.nz

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