

## **DT-300 Series**



### Lightweight and compact angular measurement device

The DT-300 is a lightweight, compact alignment and angular measurement device with convenient, high-precision laser guidance. It boasts up to 30 workdays of power and the highest water and dust protection in its category.

- High-accuracy (5", 7" and 9" models) measurements
- Ultra-rugged IP66 dust and heavy rain protection
- Compact and lightweight
- Long-lasting Li-ion or AA battery life
- Easy-to-use LCD backlit display(s)
- Precise laser pointer guidance
- Embedded tilt sensor for 5" and 7" models

#### **TELESCOPE**

Length	149 mm 152 mm (L Models)* <sup>3</sup>
Aperture	45mm
Magnification	30X
Image	Erect
Field of view	1°30' (26 m / 1,000 m)
Resolving power	2.5"
Minimum focus	0.9 m
	1.0 m (L Models)*3
Stadia ratio	100
Stadia constant	0

### ANGLE MEASUREMENT

Method	Rotary absolute encoder
Detecting	Horizontal: 1 sides
	Vertical: 1 sides
Minimum Reading	5" Model:
	1" (0.0002 gon/0.01 mil)/5" (0.001 gon/0.1 mil) (selectable)
	7" Model:
	5" (0.002 gon/0.05 mil)/10" (0.005 gon/0.1 mil) (selectable)
	9" Model:
	10" (0.002 gon/0.05 mil)/20" (0.005 gon/0.1 mil) (selectable)
Accuracy*1	5", 7", 9"
DISPLAY	
Unit	2 sides for 5" and 7" model

1 side for 9" model

### TILT ANGLE COMPENSATION (5" AND 7" MODELS)

Туре	Automatic vertical compensator	
Range of compensation	±3' (±0.0555 gon)	
Compensation constant	Can be changed (compensation is done at the same time with vertical angle 0 point)	
OPTICAL PLUMMET		
Magnification	3X	
Minimum focus	0.5 m	
SENSITIVITY OF LEVELS		
Circular level	10' / 2 mm	
Plate level	30" / 2 mm	
POWER SUPPLY		
Mode	4 AA dry cells or BDC71 (Optional accessory)	



# **DT-300 Series**

OPERATING TIME (4 AA ALKALINE BATTERIES)		
Theodolite only	~ 250 hours	
Laser only	~ 80 hours (L Models)	
Theodolite and laser	~ 55 hours (L Models)	
OPERATING TIME (BDC71)		
Theodolite only	~ 300 hours	
Laser only	~ 100 hours (L Models)	
Theodolite and laser	~ 70 hours (L Models)	
LASER-POINTER (L MODELS)		
Signal source	Red laser diode (633 nm)	
Maximum output	0.6 mW	
Laser Class	Class 2	
Laser beam range	50 m (in daylight)	
HARDWARE		
Ingress Protection	Dust and water resistance IP66 (JIS C 0920 : 2003)	
Operating temperature range	-20 to 50°C (-4 to 122°F)*2	
Storage temperature range	-30 to 60°C (-22 to 140°F) (no condensation)	
Size (with handle) $W \times D \times H$	5" and 7" Models: 173 x 181 x 318 mm 9" Models: 173 x 174 x 318 mm	
Weight (with batteries and battery holder)	5" and 7" Models: 4.1 kg (9.04 lb) 9" Models: 4.0 kg (8.82 lb)	

\*1: ISO 17123-3: 2001 \*2: No Direct sunlight at temperatures of 50°C (122°F) \*3: L = Laser Plummet Option

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