12 SPECIFICATIONS

(DT-205/207/209/209P)

Item	Item	Model		
		DT-205	DT-207	DT-209/ 209P
Telescope	Length	149mm	149mm	149mm
	Objective lens	45mm	45mm	40mm
	Magnification	30×	30×	26×
	Image	Erect	Erect	Erect
	Field of view	1° 30'	1° 30'	1° 30'
	Resolving power	2.5"	2.5"	3"
	Minimum focus	0.9m	0.9m	0.9m
	Stadia ratio	100	100	100
	Stadia constant	0	0	0
Electronic Angle Measurement	Method	Absolute	Absolute	Absolute
	Detecting	Horizontal : 2 sides	Horizontal : 2 sides	Horizontal : 1 sides
		Vertical : 1 side	Vertical : 1 side	Vertical : 1 side
	Minimum reading	1"/5" (0.5mgon/1mgon)	5"/10" (1mgon/2mgon)	10"/20" (2mgon/5mgon)
	Accuracy *1)	5"	7"	9"
	Diameter circle	71mm	71mm	71mm
Display	Unit	2 sides	2 sides	1 sides
Illumination	Display	Yes	Yes	Yes
	Reticle	Yes	Yes	No
Compensator	Tilt sensor	Automatic vertical compensator	No	No
	Compensating range	± 3'	No	No
Optical Plummet Telescope	Magnification	3x	3x	3x
	Filed of view	3°	3°	3°
	Focusing	0.5m~∞	0.5m~∞	0.5m~∞
Level Sensitivity	Plate level	40"/2 mm	40"/2 mm	60"/2 mm
	Circular level	10'/2mm	10'/2mm	10'/2mm
Water protection	Standard	IP 66	IP 66	IP 66
Power Supply	Battery	4 AA batteries	4 AA batteries	4 AA batteries
Operating Time (Alkaline manganese dry batteries), (+20°C [+68°F]Åj	Theodolite only	Approx. 140 hours	Approx. 150 hours	Approx. 170 hours
Tribrach	Type	Detachable	Detachable	Fixing: DT-209 Centering: DT-209P

Item	Item	Model		
		DT-205	DT-207	DT-209/ 209P
Others	Dimension DxWxH(mm)	149x188x313 (5.87x7.1x12.3 in)	149x188x313 (5.87x7.1x12.3 in)	DT-209: 149x188x305 (5.87x7.1x12.0 in) DT-209P: 149x188x313 (5.87x7.1x12.3 in)
	Weight (Including batteries)	4.1kg (9.0 lb)	4.1kg (9.0 lb)	DT-209: 3.4kg (7.5 lb) DT-209P: 3.8kg (8.3 lb)
	Instrument height	176 mm (6.93 in)	176 mm (6.93 in)	-------
	Serial signal RS-232C connector	Yes	No	No

*1) Standard deviation based on DIN 18723

(DT-205L/207L/209L)

Item	Item	Model		
		DT-205L	DT-207L	DT-209L
Telescope	Length	152mm	152mm	152mm
	Objective lens	45mm	45mm	40mm
	Magnification	30×	30×	26×
	Image	Erect	Erect	Erect
	Field of view	1° 30'	1° 30'	1° 30'
	Resolving power	2.5"	2.5"	3"
	Minimum focus	1m	1m	1m
	Stadia ratio	100	100	100
	Stadia constant	0	0	0
Electronic Angle Measurement	Method	Absolute	Absolute	Absolute
	Detecting	Horizontal : 2 sides	Horizontal : 2 sides	Horizontal : 1 sides
		Vertical : 1 side	Vertical : 1 side	Vertical : 1 side
	Minimum reading	1"/5" (0.5mgon/1mgon)	5"/10" (1mgon/2mgon)	10"/20" (2mgon/5mgon)
	Accuracy *1)	5"	7"	9"
	Diameter circle	71mm	71mm	71mm
Display	Unit	2 sides	2 sides	1 sides
Illumination	Display	Yes	Yes	Yes
	Reticle	Yes	Yes	No
Compensator	Tilt sensor	Automatic vertical compensator	No	No
	Compensating range	±3'	No	No

Item	Item	Model		
		DT-205L	DT-207L	DT-209L
Optical Plummet Telescope	Magnification	3x	3x	3x
	Filed of view	3°	3°	3°
	Focusing	0.5m~∞	0.5m~∞	0.5m~∞
Level Sensitivity	Plate level	40"/2 mm	40"/2 mm	60"/2 mm
	Circular level	10'/2mm	10'/2mm	10'/2mm
Water protection	Standard	IP 66	IP 66	IP 66
Power Supply	Battery	4 AA batteries	4 AA batteries	4 AA batteries
Operating Time (Alkaline manganese dry batteries), (+20°C [+68°F]Åj	Theodolite only Laser only Theodolite and laser	Approx. 140 Approx. 80 Approx. 45 (hours)	Approx. 150 Approx. 80 Approx. 45 (hours)	Approx. 170 Approx. 80 Approx. 45 (hours)
Tribrach	Type	Detachable	Detachable	Fixing
Others	Dimension DxWxH(mm)	152x188x313 (5.97x7.1x12.3 in)	152x188x313 (5.9x7.1x12.3 in)	152x188x305 (5.9x7.1x12.0 in)
	Weight (Including batteries)	4.2kg (9.2 lb)	4.2kg (9.2 lb)	3.6kg (7.9 lb)
	Instrument height	176 mm (6.93 in)	176 mm (6.93 in)	---------
	Serial signal RS-232C connector	Yes	No	No
Laser beam	Laser class	Class 2 Class II	Class 2 Class II	Class 2 Class II
	Wave length	633nm	633nm	633nm
	Maximum output	0.6mW	0.6mW	0.6mW
	Laser beam range*2)	50m	50m	50m

*1) Standard deviation based on DIN 18723

Laser beam

Laser class : Class II (Class 2)
Wave length : 633nm
Maximum output : 0.6mW
Laser beam range : 50m
Condition Weather : Fine
Time : The daylight hours

Laser beam diameter(When focused) *2)

Telescope Magnification	Distance(m)	5	10	20	30	50
30x	Beam diameter(m)	0.1x0.2	0.2x0.4	0.5x0.7	0.7x1.1	1.2x1.9
26x	Beam diameter(m)	0.1x0.2	0.3x0.4	0.6x0.8	0.8x1.2	1.4x2.0

*2) The laser beam diameters are theoretical values
The visible laser beam diameter will vary with brightness of circumstance.