

1" Micro Optical Theodolite



Advanced Surveying Instruments (India) Pvt. Ltd.

Applications:

1" micro optical theodolite is a kind of precision angle-measuring instrument. It plays a very important role in geodesic survey and engineering measurement, therefore it is widely used in third-order, fourth-order triangulation, building, roadwork, pipe laying, tunnelling, mining, cadastral survey as well as machine tooling and installation etc.

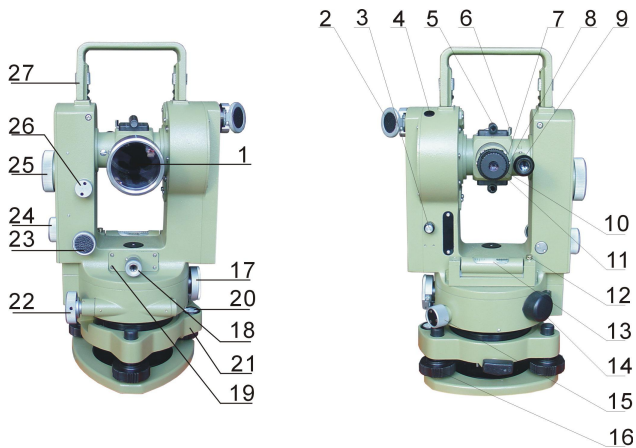
Technical data:

Accuracy	
Standard deviation in horizontal direction measured at face left and face right	$\pm 1''$
Standard deviation in vertical angles measured at Face left and face right	$\pm 1''$
Telescope	erect image
Clear objective aperture	40mm
Magnification	30x

Field of view at 1000m	24m
Shortest focusing distance	2m
Multiplication factor	100
Additive constant	0
Grass Circles	360°
Graduation diameter:	
HZ circle	90mm
V circle	70mm
Graduation interval of HZ and V circles	20'
Smallest interval of optical micrometer	1"
Automatic Vertical Index	
Setting accuracy	±0.3"
Working range	±0.3'
Reading Microscope	
Magnification:	
HZ system	48×
V system	62×
Bubble sensitivity per 2mm run	

Circular level	8'
Plate level	20"
Optical Plummet	
Magnification	3x
Angular field of view	7°30
Focusing range	0.3 – 6m
Weight	
Net weight	6kg
Gross weight	9kg

Nomenclature



1. objective
2. illumination mirror
3. press button
4. cover
5. optical sight
6. level
7. bayonet ring
8. adjustment screw
9. eyepiece of microscope
10. eyepiece of telescope
11. focusing sleeve
12. adjustment screw
13. plate level
14. Hz circle drive
15. vertical clamp
16. footscrew
17. illumination mirror
18. optical plummet
19. cover
20. circular bubble
21. adjustment screw
22. horizontal drive
23. vertical drive
24. change-over knob
25. micrometer knob
26. horizonatal clamp
27. carrying handle