

## DS05

### Precision Level



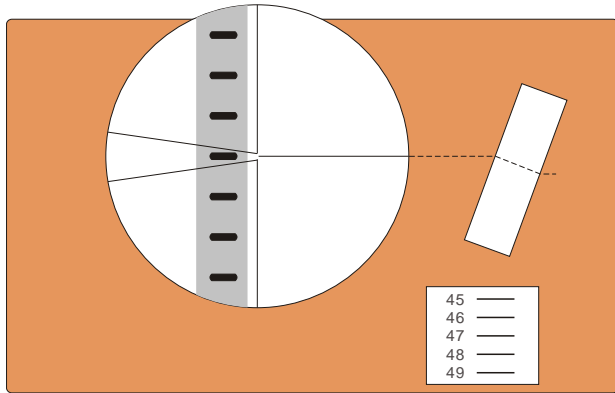
- Built-in parallel-plate micrometer
- Pentaprism for easy viewing of circular level
- High precise reading, 0.1mm is read directly, 0.01mm can be estimated
- Equipped with a press button for compensator checking
- Standard deviation of 1km double run:  $\leq \pm 0.5\text{mm}$
- Dismountable eyepiece, assorted accessories, such as: Diagonal Eyepieces:FJ19
- Adopt crossing suspender frame and compensator of air damper
- Wide working temperature from  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ , water and dust protection: IP55

# DS05 Precision Level

## ■ Applications

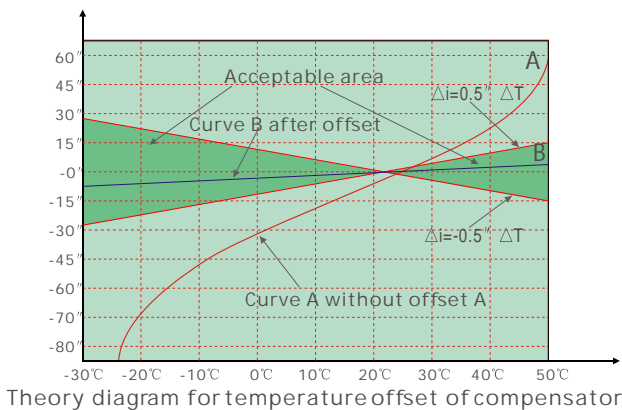
Designed for the highest accuracy in geodesy, engineering and industry. Model DS05 Automatic Level is adoptable for the second and third-order geodetic leveling of national networks; It can be used for engineering and deformation surveys, such as height control for engineering projects, deformation and subsidence measurements, checking bridges and structures, monitoring movements, etc. It is also used for general construction engineering and installation of large size machines.

### ● Reading



### ● Compensator

We know that compensator is made up of metal material and glass material, the temperature can affect these materials results in slight changes of compensator, then causes change of  $I$  angle. The instrument without temperature offset is always not to reach the standard of nation (GB/T10156-1997). In the diagram, the green area where between the red lines is a acceptable area when the compensator is changed along with the temperature's change (Company standard:  $\pm 0.5''/^\circ\text{C}$ ). The red thick line A is a change curve for angle  $I$  of level without temperature offset. Our DS05 levels add a device of temperature offset, it can correct the change value of angle  $I$  when changing the temperature. The green thick line B is a change curve for angle  $I$  after offset, the instrument can be good work in the mal-conditions of large temperature change, especially apply to transformation observation at a long time.



## ■ Technical data

DS05	
Telescope	
Image	Erect
Clear objective aperture	45mm
Magnification	38x
Field of view at 100m	2.3m
Shortest focus distance	1.6m
Multiplication factor	100
Additive constant	0
Accuracy	
Standard deviation of 1km double run	$\pm 0.5\text{mm}^*$
Automatic compensator	
Working range	15'
Setting accuracy	$\pm 0.5\text{mm}$
Setting time	$\leq 2\text{s}$
Others	
Sensitivity of circular level per 2mm run	10' / 2mm
Operating Temp	$-30^\circ \sim +50^\circ$
Net Weight	3.5kg
Parallel plate micrometer	
Range	10mm
Interval	0.1mm
Estimation	0.01mm
Accessories	
Diagonal eyepiece (FJ19)	Optional
Tripod (YGL165)	Optional
Invar staff (BGYCH 2m)	Optional

\* Depending on staff and levelling technique.

### Related products



DS22+FS1



FJ19



YGL165



BGYCH 2m

Illustrations, descriptions and technical specifications are not binding and may change

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Suzhou FOIF Co., Ltd.

TEL: +86 512 65224904  
FAX: +86 512 65230619  
Http://www.foif.com.cn  
E-mail: internationalsales@foif.com.cn  
ADD: 4 Kong Fu Si Lane, Suzhou 215006, P.R. China



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