			PW-BDS70	0 Microscope Specifica	ation	
			PW-BDS710	PW-BDS710-FL	PW-BDS720	PW-BDS720-FL
Optical System			NIS InÞnite Optical System (F200)			
Observation method			BrightÞeld, Phase Contrast, Hoffman phase Contrast, Emboss Contrast	BrightÞeld, Phase Contrast, Hoffman, phase Contrast, Emboss Contrast, Epi Fluorescence	BrightÞeld, Phase Contrast, Hoffman phase Contrast, Emboss Contrast	BrightÞeld, Phase Contrast, Hoff man, phase Contrast, Emboss Contrast, Epi-Fluorescence
	Tramsmitted illumination		3W S-LED 3W S-LED Kohler Illumination			
Illumination	Episcopic illumination			LED illuminator, built-in Fly-eye lens, Can be conÞÞgured with up to 3 different ßuorescence LED units; available wave- lengths:365, 405, 485, 525nm		LED illuminator, built-in Fly-eye lens, Can be conÞÞgured with up to 3 different ßuorescence LED units; available wavelengths:365, 405, 485, 525nm
Viewing Head		Seidentopf Viewing Head, Inclined at 45°, Interpupillary 48-75mm, Additional camera port eyepiece /port 100/0 : 0/100				
Eyepiece(F.O.V)		SW10×(22), WF15×(16), WF20×(12)				
Focusing		Coaxial coarse and Pne adjustment, the function of coarse tightness adjustment, Fine Division 1 um,Fine stroke 0.2mm per rotation , Coarse stroke 37.5mm per rotation. Up 7mm, down1.5mm.				
Nosep	iece	Quintuple Nose- piece Coded Quintuple Nosepiece				
LCD Screen		Function display magniPcation, timing sleep, brightnes indication and lock, etc.				
Condenser		Condenser NA 0.3, WD 75mm, without Condenser WD 187mm				
Stage		Stage: 170 (X) $\times$ 250 (Y)mm Attachable Mechanical Stage: 128 (X) $\times$ 80 (Y), Accepts 5 types of micro-testplate, well clamper and stage clip.				
Phase System			Condener with 4x Phase Annulus Plate 10x,20,40x Universal Phase Annulus Plate			
Hoffman Phase		10×. 20×. 40× Hoffman Condenser, Special objective				
Relief 3D Contrast			Condenser and Eyepiece with Emboss Contrast 10×、20×、40×, Universal Emboss contrast slide			
Epi-Fluorescence Attachment				Filter cubes with noise termi- nator mechanism ConPgure with up to 3 Epi-Buorescence PPIter cubes, Attachable Contrast Shield.		Filter cubes with noise terminator mechanism ConPgure with up to 3 Epi- Buorescence ÞPlter cubes, Attachable Contrast Shield.
Dimensions			244 (W)×543 (D)×526 (H)mm	244 (W)×559 (D)× 526 (H) mm	244 (W)×543 (D)× 526 (H)mm	244 (W)×559 (D)× 526 (H) mm
Video Adapter			1×, 0.5×, C Mount			
Accessories			ECO (No operator, turn off the light source automatically in 15 minutes) ;Heating Stage			

Ningbo ProWay Optics & Electronics Co.,Ltd. Tel: +86 574 87175236 Fax: +86 574 87175233 Email: proway@proway-microscope.com Website: www.proway-microscope.com

# CULTURE MICROSCOPE

INVERTED BIOLOGICAL MICROSCOPE FOR CULTURE

PW-BDS700

Professional Cell Observation, Explore Genetic Mysteries







## INTELLIGENT

## COMFORTABLE

## ACCURATE



## **PW-BDS700**

1.Make Reasonable improvement on basis of scientific research microscope. More suitable for laboratory observation of cells. 2.Adopt long life LED light source and infinity optical system, easy to obtain high-definition and high contrast wide viewing images. 3. The body is compact and stable, and the operation buttons are well arranged, the cells can be observed, sampled and processed in the super clean bench freely. 4. Using 3 different color filter, it widely enlarges selectivity for dye. LED illumination with large intensity and even brightness provides support for high quality fluorescence observation. 5.With standard camera port, Nexcope camera and image processing software, providing low noise, high sensitivity and resolution imageity and resolution image

## **Professional Cell Observation**

## Ergonomic design, comfortable operation

#### ·45° Inclined Viewing Head

Inclined viewing head makes the user to operate microscope in a comfortable position. Minimize muscle tension and discomfort caused by long working hours.

#### · Long-handle mechanical stage

The user can make comfortable and smooth movement during the operation, thereby improving work efficiency and comfort.

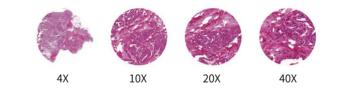
## High brightness, long lifetime LED Illumination

· LED illuminator, suitable for various observation With a high brightness and long lifetime LED illumination system fo both transmission and fluorescent lighting, proving even brightnes and cool lighting.

## Intelligent operating system

### Objective coding converter

It can memorize the illumination brightness when using each objective. When different objectives are converted to each other, the light intensity is automatically adjusted to reduce visual fatigue and improve work efficiency.



### Use a dimming knob to achieve multiple functions

Click: Enter standby status Double click: light lock or unlock Rotation: Adjust brightness

Press + up-spin: Switch to the upp Press + down-spin: Switch to the u Press 3 seconds: Set the time of tu the light after lea

### The display of microscope use state

The liquid crystal screen on the front of the microscope can displa using state of the microscope, including magnification, light inte standby status, and so on.



Start& working mode

leaving mode







		BDS710/BDS720	BDS710-FL/BDS720-FL	
or ss	Transmitted	Bright Field ,Phase Contrast ,Hoffman Phase,Emboss Contrast		
	Fluorescent	-	Epi-Fluorescence	





Lock mode Turn off the light after standby mode



## More convenient for cell sampling and aseptic manipulation

The microscope control mechanism is reasonable in layout and easy to operate

The frequently used control mechanisms are close to the user and in low-hand position. This kind of design makes operation more quickly and conveniently. and reduce the fatigue caused by the long observation. On the other hand, it reduces the airflow and dust caused by large amplitude operation, and it is very effective to reduce the probability of sample pollution. It is a strong guarantee for the accuracy and repeatability of the experimental results.

## The body is compact, stable and suitable for clean bench

· Can be sterilized in the clean bench

On the premise of ensuring the effect of imaging, NIB600 is with relative compact design. The volume and weight of the body is reduced as much as possible in principle of stablity. The compact body is with anti-UV coating and can be placed into the clean bench for sterilization under UV lamp.

· Cell sampling and operation can be performed in clean bench The distance between the eye point to the operation button and the focusing knob of the NIB400 is relatively short, and the distance from the stage is far away. It is available to make the viewing head and operating mechanism outside, and stage, objectives and sample inside. So realize cell sampling and operation inside and observing comfortably outside.

## Various holders for different culture containers

Various holders are available for different culture containers, such as Petri dishes, well plates, and culture flasks. As well as available for different size Petri dishes.



Slide Glass Holder Φ65mm

Universal Holder Terasaki Holder Petri Dish Holder

Φ54mm

Peteri Dish Holde

Φ90mm

## Detachable condenser

When culture flask is used, the condenser can be removed to increase working distance. It is also suitable for multilayer culture flask.



## **Transmission**

Phase Contrast

By using changes in the refractive index, high contrast microscopic images of transparent samples can be obtained with phase contrast observation technique. The advantage is that the details of live cell imaging can be obtained without staining and fluorescent dyes. Application range: Living cells in culture, Microorganism, Tissue slide, Subcellular graims (including cell nuclei and organelles).



## Hoffman Modulation Phase Contrast

With slant light, changing phase gradient into light intensity variety, it can be used to observe unstained cells and living cells.

## **3D Emboss Contrast**

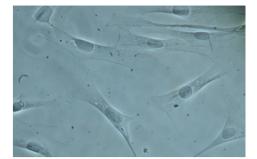
Even without extra optical components, no glare 3D image can be obtained just through adding adjustment slider. Both glass and plastic Petri dishes are available.



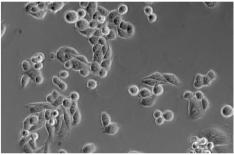


















## **Fluorescent observation**

# LED light makes fluorescent observation easier

#### • Uniform brightness

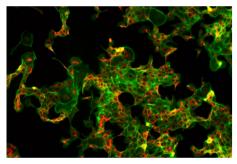
Matching with Kohler illumination, the Fly-eye lens delivers uniform brighness to the entire filed of view, whether through the eyepiece or through CCD camera.

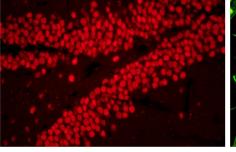
#### · LED Easy to use

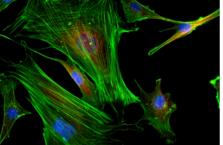
Compared with the traditional mercury bulb, the LED elimiate frequent bulb replacements, saving time and monney. Also the problems of preheating, cooling and high temperature is solved.

## Suitable for a variety of fluorescent dyes

Equipped with 3 fluorescent filter blocks, it provides a wide range of choice of dyes and capture clear high contrast fluorescence images.







Breast cancer

Hippocampus

HC3T3 mouse brain nerve cells

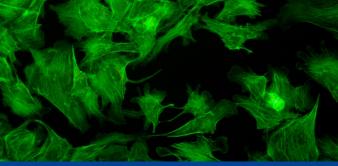
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### **Contrast Shield**

The Contrast Shield can effectively block the interference of the external light, increase the contrast of the fluorescent image, and provide a high signal-to-noise ratio fluorescent image. When need phase contrast observation, the Contrast Shield is very convenient to be removed from the light path, avoiding influence on the quality of phase contrast.

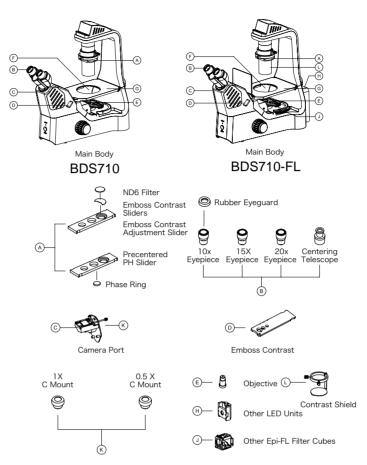


Without contrast shield

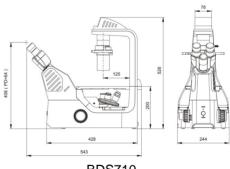


With contrast shield

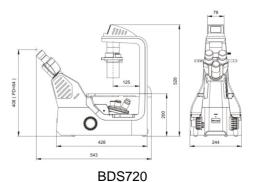
## SYSTEM LAYOUT

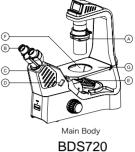


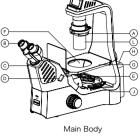
## DIMENSION FIGURE



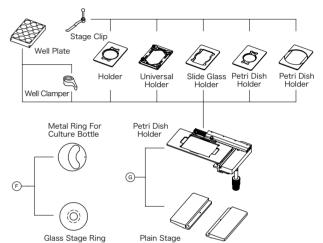




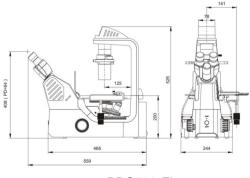




BDS720-FL



(Unit: mm)



BDS710-FL

