

## 국문규격서

관세분류번호 (외자인 경우)	품 명	단 위	수 량
9011.10.1000.	입체현미경	대	1

**□ 세부규격**

<p>A. 기기 기본정보:</p> <ul style="list-style-type: none"> <li>- 작동방식: 텔레스코프 방식(Telescope system)</li> <li>- 종합배율 : 10배 ~ 80배(1배율 대물렌즈 장착시)</li> <li>- 고선명도 3D효과, 고분해능 구현 : 1배율 대물렌즈 장착시 종합 10배율 : 66LP/mm, 종합 80배율 : 346LP/mm</li> <li>- 기본구성으로 접안렌즈 구경 23mm 광역화각 영역</li> <li>- 고정밀 초점정확도</li> <li>- 사용자 친숙형 초점 조절 나사 및 배율 조절 나사.</li> <li>- 줌비율 : 1:8(1.0x - 8.0x)</li> <li>- 최대 350mm 높이 이동(350mm Free Working Space)</li> <li>- 최대 거치 가능 무게 : 10Kg.</li> </ul> <p>B. 제원사항:</p> <ol style="list-style-type: none"> <li>1. 접안렌즈             <ul style="list-style-type: none"> <li>o 10배율 23mm직경(Field of view:23mm)</li> </ul> </li> <li>2. 대물렌즈             <ul style="list-style-type: none"> <li>o PlanApo S 1.0X (초점거리: 60mm) 개구수=0.144</li> </ul> </li> <li>3. 줌비율             <ul style="list-style-type: none"> <li>o 8:1 APO</li> </ul> </li> <li>4. 줌범위             <ul style="list-style-type: none"> <li>o 1X - 8X</li> </ul> </li> <li>5. 카메라 장착용 중앙블럭 시스템             <ul style="list-style-type: none"> <li>o 3가지 모드 변환 가능 : 카메라 전용, 카메라/육안 동시관찰, 육안전용</li> </ul> </li> <li>6. 대물렌즈 리벌버&amp;공축조명 복합 시스템             <ul style="list-style-type: none"> <li>o 최대 3종류의 배율별 대물렌즈 장착가능</li> <li>o 반사광용 샘플 관찰을 위한 공축조명 동시 구현가능</li> <li>o 육안관찰시 대물렌즈를 양 관찰축 가운데 위치시킬 수 있으며(3D관찰), 카메라 촬영시 한 쪽 축면으로 과다반사가 일어나지 않도록 오른쪽 축으로 대물렌즈 이동시킬 수 있음(2D모드)</li> <li>o 비네팅 비발생 구조</li> </ul> </li> <li>7. 고정식 재물대             <ul style="list-style-type: none"> <li>o 대형평판 재물대: 250 x 410 mm</li> </ul> </li> <li>8. X,Y 이동식 재물대             <ul style="list-style-type: none"> <li>o Anodizing코팅 재물대 : 이송가능범위 150mm X 100mm</li> </ul> </li> </ol>
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- 투과광용 유리 프레임 : 237mm X 157mm(크기)
- 반사광용 금속 프레임 : 237mm X 157mm(크기)
- 9. 투과용 고정식 재물대
  - 빛이 투과되는 관찰대상물용
    - : 투과용 명시야, 암시야, Oblique View, 투과용 편광필터 장착가능(옵션)
- 10. 광원장치
  - 150W급 할로겐 광도의 LED냉열조명
  - 색온도 : 백색광 6200켈빈
  - 수명 : 50,000시간
  - 저전력소모 : 70와트/시간
  - 저소음 : 저소음 냉각팬
  - 전원이 들어온 상태에서 광원장치 탈거시 자동 광공급부 차단
- 11. 현미경 전용 고속 CCD카메라.
 

CCD기반 해상도	1388x1038=1.4 mega pixels
픽셀크기	4.65 $\mu$ m x 4.65 $\mu$ m
센서크기	6.3mm x 4.8mm, equivalent to 1/2"
스펙트럼감지 범위	400...700nm.
실시간영상 frame :	
h    x    v	Readout frame(s)
1392 x 1038	15
768 x 520	26
600 x 480	28

  

Regions ("ROI"):	Adjustable
디지털비트 :	8 Bit / Pixel
Integration Time:	1 ms to approx. 4 s
신호전송방식 :	IEEE1394 (FireWire) interface
장착방식 :	C-Mount
크기/무게 :	4.4 cm x 4.4 cm x 5.05 cm / 150 g
외피재질:	Blue varnished aluminum
운영체제:	Win 2000, Win XP/Vista/7
Registration:	CE
전원공급방식:	via FireWire(IEEE1394B) interface
운용환경조건 :	+5°~ +45°

관리번호(기재치 없음)	
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영 문 규 격 서  
COMMODITY DESCRIPTION

HSK. No.	ITEM No.	DESCRIPTION	UNIT	QUANTITY
9011.10 1000.		Stereo Microscope "SteREO Discovery. V8"	Set	1

Part . A

1. Universal Research Stereomicroscope

**A.Feature:**

- Operating principle: Telescope system.
- Most brilliant 3D effect.
- Largest object fields: 23mm field of view in the basic configuration.
- Coded triple revolving nosepiece.  
: for an efficient set of objectives covering a range of standard
- Standard magnifications: 10x-80x(with 10x eyepiece)
- 350mm of Max height using Focus Profile.
- Max weight of lift : 10kg

**B. Specification:**

1. Eyepiece

- o 10X/ 23mm (Field of view:23mm)

2. Objectives

- o PlanApo S 1.0x (Free Working Distance: 60mm) N.A=0.144
- o Highest numerical aperture of basic stereomicroscope body is 0.144.

3. Zoom factor

- o 8 : 1 APO

4. Zoom range

- o 1x - 8x

5. Stage

- o Large scratch resistant mechanical stage plate: 250 x 410mm

6. Mechanical X,Y stage

- o Anodizing Coating stage : travel range 150mm X 100mm
  - Glass frame for Transmitted light : 237mm X 157mm
  - Steel frame for Reflected light : 237mm X 157mm

7. Transmitted illumination stage

- o transmitted light for BrightField, Darkfield, Oblique View,
- o Optionally attachable for POL filter

8. Objective revolver for 3 objectives with Coaxial illumination system

- o Max 3 different objective(Objective Class, Magnification)
- o Simultaneously usable coaxial illumination for reflected sample
- o Avoiding vignetting mechanism.
- o 3D mode for Ocular observation in center position to microscope stand, rotatable right slightly for 2D mode of Camera Observation.

9. Illuminator

- o LED cold-light source as well as 150w of Halogen illuminator power.
- o Lifetime : 50,000H
- o Color Temperature : 6200K
- o Elec. Consumable rate : 70W/hour
- o low noise : low noise cooling fan
- o Safety Mode : Dischargeable automatically without illuminating device

10. Microscopy Digital CCD Camera

incl. AxioVision driver and FireWire / IEEE1394 interface cable  
Number of Pixels: 1392 (H) x 1040 (V) = 1.4 Mega pixel color  
Pixel size: 4.65  $\mu$ m x 4.65  $\mu$ m  
Chip size: 1/2"

Live frame rates (depending on hardware and software configuration):

**Live frame rates (depending on hardware and software configuration):**

H	x	V	Frame Rate@1ms
1392	x	1038	15 fps

Readout of Sensor Sub-Regions ("ROI"): Adjustable  
 Digitization: 8 Bit / Pixel  
 Integration Time: 1 ms to approx. 4 s  
 Interface: IEEE1394 (FireWire) interface  
 Optical Interface: C-Mount  
 Size / Weight: 4.4 cm x 4.4 cm x 5.05 cm / 150 g  
 Housing: Blue varnished aluminum  
 Operating Systems: Win 2000, Win XP  
 Registration: CE  
 Power Supply: via FireWire interface  
 Environmental conditions: + 5° ... + 45° Celsius

C. Consisting of

Stereo Microscope Body	1
Intermediate phototube 50:50/0:100/100:0	1
Binocular	1
Eyepiece 10x	2
Eyepiece Eyecup	2
Objective Plan Apo 1.0x	1
Stand Base	1
Dust Protection	1
Coarse/Fine drive column	1
Cold-Light LED	1
Halogen-light filter	1
Day-light filter	1

Ring illuminator	1
Objective nosepiece, 3x-Coax Cod	1
Lambda/4 Cap S	1
Flexible light guide 2 branches	1
Transmitted-light equipment S	1
Mechanical stage 150x100	1
Insert plate glass	1
Insert plate metal	1
Camera adapter 1x	1
Microscopy camera 1.3Mpixel	1
FireWire 1394 interface card	1
Image analysis application Rel. 4.8.2	1
i5 computer with 23" LCD Monitor	1

#### D. Remarks

1. Requiring business meeting for an image analysis computer prior to microscope delivery
2. Warranty : One year after installation