



OPTO-EDU A14.1098

Basic Information

- Place of Origin: China
- Brand Name: CNOEC, OPTO-EDU
- Certification: CE, Rohs
- Model Number: A14.2603-TR
- Minimum Order Quantity: 1 pc
- Price: FOB \$1~1000, Depend on Order Quantity
- Packaging Details: Carton Packing, For Export Transportation
- Delivery Time: 5~20 Days
- Payment Terms: T/T, West Union, Paypal
- Supply Ability: 5000 pcs/ Month



Product Specification

- Head: Seidentopf Trinocular Head, Inclined 45°, Interpupillary Distance 48~76mm
- Eyepiece: WF10x/22mm, Diopter Adjustable
- Nosepiece: Large Diameter Quintuple
- Phase Contrast: Phase Contrast Annular Plate For 20x/40x
- Filter: Blue, Green
- Light Source: Transmit Light, Halogen 6V30W, Koehler Illumination
- Highlight: **inverted optical microscope OPTO-EDU, laboratory inverted microscope A14.1098, OPTO-EDU microscope with warranty**

Product Description

OPTO-EDU A14.1098 Auto Research Level Inverted Biological Microscope

Advanced motorized inverted biological microscope designed for life science research applications. Features comprehensive observation capabilities including bright field, phase contrast, and optional dark field, polarization, DIC, and fluorescence observation methods.

Key Features

- Trinocular head with built-in Bertrand lens and SW10x/22mm eyepieces
- Infinity Plan Semi-APO PH objectives: 10x, 20x, 40x
- 5.7" LCD touch screen for intuitive control interface
- Motorized sextuple nosepiece with objective protection
- Motorized X/Y/Z stage with high precision positioning
- Motorized phase contrast disc and multi-function turret
- Media lens magnification switch 1.0x/1.5x CF
- Multiple video ports on left/right side and trinocular port
- 5W LED Kohler illumination with adjustable brightness



OPTO-EDU (BEIJING) CO., LTD.

F-1501 Wanda Plaza, No.18 Shijingshan Road, Beijing 100043, China
Tel:+8610 88696020 Fax:+8610 88696085

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A14.1098/A16.1098

Inverted Biological Microscope, Full Motorized , Semi-APO, BF+PH





A14.1096
Inverted Laboratory Microscope, Manual,
Semi-APO, BF+PH, DF/ PL/DIC



A16.1096
Inverted Fluorescent Microscope, Manual,
Semi-APO, BF+PH +FL, DF/PL/DIC



A14.1097
Inverted Laboratory Microscope, Semi-Auto,
Semi-APO, BF+PH, DF/ PL/DIC, Touch Screen



A16.1097
Inverted Fluorescent Microscope, Semi-Auto,
Semi-APO, BF+PH+FL, DF/PL/DIC, Touch Screen



A14.1098
Inverted Biological Microscope, Auto, Semi-
APO, BF+PH, DF/ PL/DIC, Touch Screen



A16.1098
Inverted Biological Microscope, Auto,
Semi-APO, BF+PH+FL, DF/PL/DIC, Touch Screen

Research Microscope Series Overview

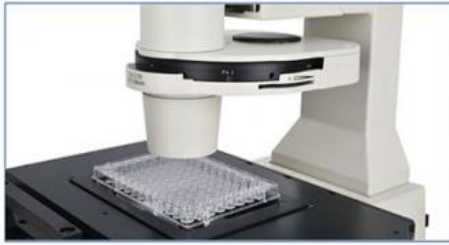
The A14.1098 represents the motorized model in our research inverted microscope series, upgraded from previous manual and coded models to provide comprehensive functionality for advanced life science research applications.

System Condenser

Supports brightfield observation, phase contrast observation, and DIC observation for maximum experimental flexibility.

Ergonomic Design

Transmitted illumination column ensures larger working space and convenient sample changing.



N-iPLFN PH Objectives

Semi-apochromatic objectives feature built-in correction rings to compensate for nonstandard cover glass thickness variations.

Multi-port Optical Path

Optical output selection dial distributes images to different ports for expanded optical applications.



Intermediate Magnification

Quick switching between 1x and 1.5x intermediate magnification via smooth turntable operation.

Status Display

Front panel touch screen shows microscope status for convenient use in darkroom conditions.



Electric Control System

Comprehensive motorized control system enables software operation of objective lens conversion, focusing, condenser conversion, and fluorescent module conversion. High-speed electric control simplifies complex operations while reducing cell exposure time and phototoxicity for more accurate experimental results.

A14.1098, A16.1098 Details

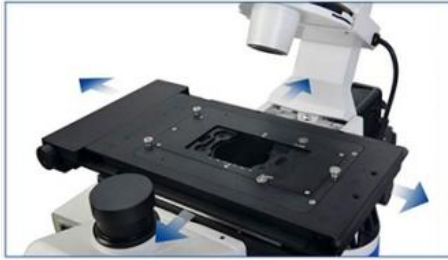


Motorized Stage

Large stroke, high precision positioning suitable for multi-point observation applications.

Motorized Condenser

Electric conversion of condenser modules for automated operation.



Z-axis Autofocus

Fast and accurate Z-axis control with high precision positioning.

Motorized Nosepiece

Arbitrary conversion of six objective lenses with DIC capability.

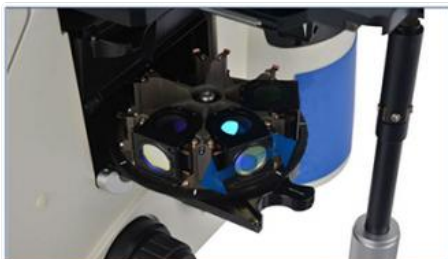


Filter Cube Turret

Random conversion of 6-hole fluorescent modules for flexible imaging.

Joystick Control

Flexible positioning of electric stage with integrated control.



Front Operation Screen

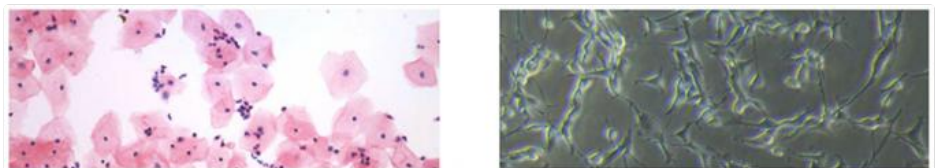
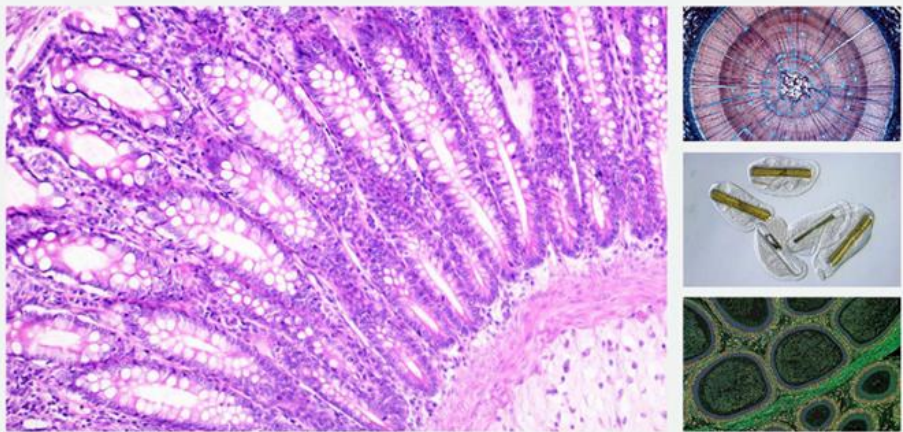
The A14.1098 features a comprehensive front operation screen that consolidates all microscope controls including electric focusing, stage movement, objective lens selection, condenser module conversion, intermediate magnification conversion, side port output selection, aperture stop adjustment, and multi-function turntable conversion.



Microscope Status Display	Selection of Observation Mode	Stage Control
<p>状态/用户栏</p> <p>观察方式: FLUO+PH</p> <p>多功能模块: FI-TRITC</p> <p>物镜: 10X</p> <p>中间倍率: 1.5X</p> <p>聚光镜: PF</p> <p>端口: L-100%</p> <p>ESC: ● LIMIT: ●</p> <p>光源亮度: 0</p> <p>光源亮度: 2</p> <p>照明方式: TL</p> <p>自动聚焦: ●</p> <p>调焦: ●</p> <p>IL-Shutter: IL</p>	<p>聚光镜</p> <p>BF PH1 PH2</p> <p>PH3 DIC1 DIC2</p> <p>DIC3</p> <p>多功能模块</p> <p>BF FL-R FL-G</p> <p>FL-B FL-U</p> <p>透射 BF PH DIC</p> <p>POL DF</p> <p>落射 FLUO</p> <p>组合 FLUO+PH FLUO+DIC</p> <p>棱镜 C IL-Shutter</p>	<p>载物台</p> <p>X/Y</p> <p>Z</p> <p>X: +10,266 mm</p> <p>平台</p> <p>粗调</p> <p>Y: -10,266 mm</p> <p>细调</p> <p>限位 保存位置 复位 保存</p>

Modular Design Imaging

OPTO-EDU





Differential interference contrast (DIC)
 Differential interference is a very cost-effective optical technology, which does not need expensive optical devices. Relief contrast only uses brightfield objective lens and two phase contrast adjustment sliders; For thick samples, such as induced pluripotent stem cells, differential interference can provide pseudo-three-dimensional glare-free images, while halo usually appears when using traditional phase contrast observation methods.



Fluorescence Imaging

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To provide you with reliable, clear and high-resolution fluorescent images.

Adopt the latest coating technology.

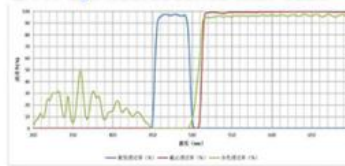
Adopting the latest advanced secondary ripple elimination coating technology, the fluorescence has higher transmittance, sharper cut-off and higher detection efficiency.

Fluorescence observation is more comfortable.

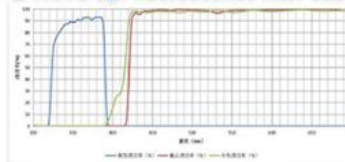
All fluorescent color filter components adopt ultra-high performance color filters. The fluorescent lighting pillar can be equipped with six color filter groups, which can simultaneously image a variety of dyed specimens. High-sensitivity fluorescence can obtain bright imaging effect. The leading coating technology also reduces scattered light and spontaneous fluorescence, ensuring a higher sex-to-noise ratio.



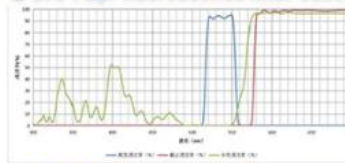
FIT Epi-fluorescence filter cube



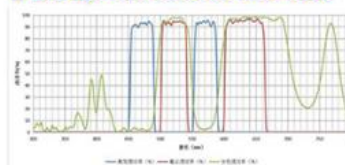
TRITC Epi-fluorescence filter cube



DAPI Epi-fluorescence filter cube



B/G Epi-fluorescence filter cube

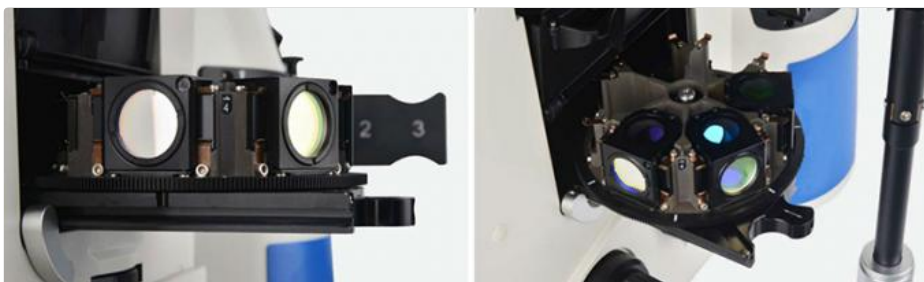


Fluorescent Imaging Capabilities

Clear observation results obtained using various fluorescent dyes with optimized excitation modules and filter systems.

Fluorescent Excitation Module

Multi-functional six-station turret structure allows easy removal from main machine and convenient replacement of various fluorescent excitation modules.



Diaphragm System

Reflective field diaphragm, aperture diaphragm and filter insert plate provide versatile imaging capabilities for living cell studies. Optimal

fluorescence intensity adjustment based on selected fluorescent module and objective lens.



► **Fluorescent power supply**

Mercury source

Osram 100W HBO ultra-high pressure spherical mercury lamp is standard, with large fluorescence brightness and uniform field of view.



LED light source

4-color LED light source, adjustable brightness, and the life of the bulb is up to tens of thousands of hours. Low phototoxicity and high friendliness to fine samples such as cells, which solves the problems of preheating, cooling and excessive temperature in use of traditional mercury lamps.



A14.1098 Specification **OPTO-EDU**

Technical Specifications

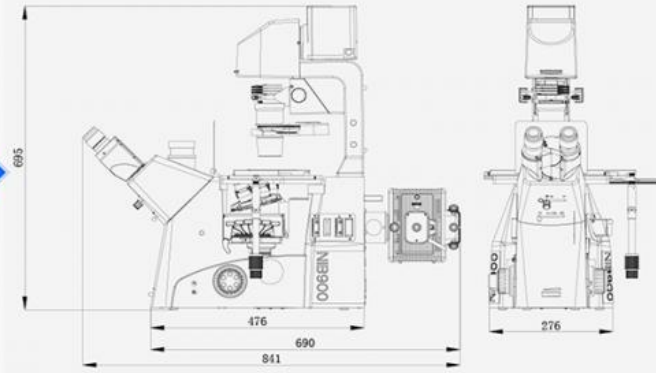
Feature	A14.1096	A14.1097	A14.1098	A16.1096	A16.1097	A16.1098	Catalog No.
Optical System	●	●	●	●	●	●	NIS60 Infinite Optical System, Semi-APO
Observation Methods	Bright Field ● Phase Contrast ●	Bright Field ● Phase Contrast ●	Bright Field ● Phase Contrast ● Fluorescent ●	Bright Field ● Phase Contrast ●	Bright Field ● Phase Contrast ●	Bright Field ● Phase Contrast ● Fluorescent ●	Optional: Dark Field, Polarizing, DIC
LCD Screen	-	●	-	-	●	-	4.3" LCD Information Touch Screen
5.7" LCD Screen	-	-	●	-	-	●	5.7" LCD Information Touch Screen with comprehensive controls
Head	●	●	●	●	●	●	Seidentopf Trinocular Head with Bertrand Lens
Nosepiece	●	-	-	●	-	-	Manual Sextuple Nosepiece
Coded Nosepiece	-	●	-	-	●	-	Coded Manual Sextuple Nosepiece
Motorized Nosepiece	-	-	●	-	-	●	Motorized Coded Sextuple Nosepiece
Focusing	●	●	-	●	●	-	Coaxial Coarse & Fine Focusing
Motorized Focusing	-	-	●	-	-	●	Motorized Z-axis with 0.02μm resolution
Working Stage	●	●	-	●	●	-	Three Layer Mechanical Stage
Motorized Stage	-	-	●	-	-	●	Motorized X/Y Axes Stage
Illumination	12V100W Halogen	5W LED	5W LED	12V100W Halogen	5W LED	5W LED	Kohler Illumination

Note: "●" indicates standard outfits, "○" indicates optional accessories, "-" indicates unavailable

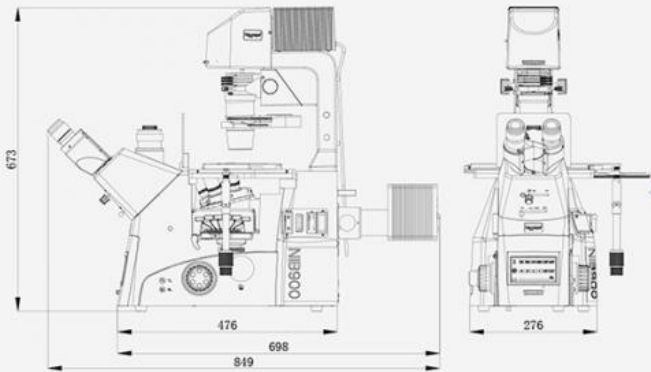
A14.109-6&7&8, A16.109-6&7&8 Size (Unit: mm)

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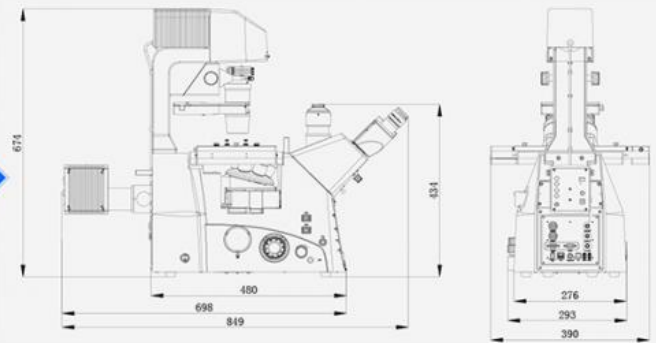


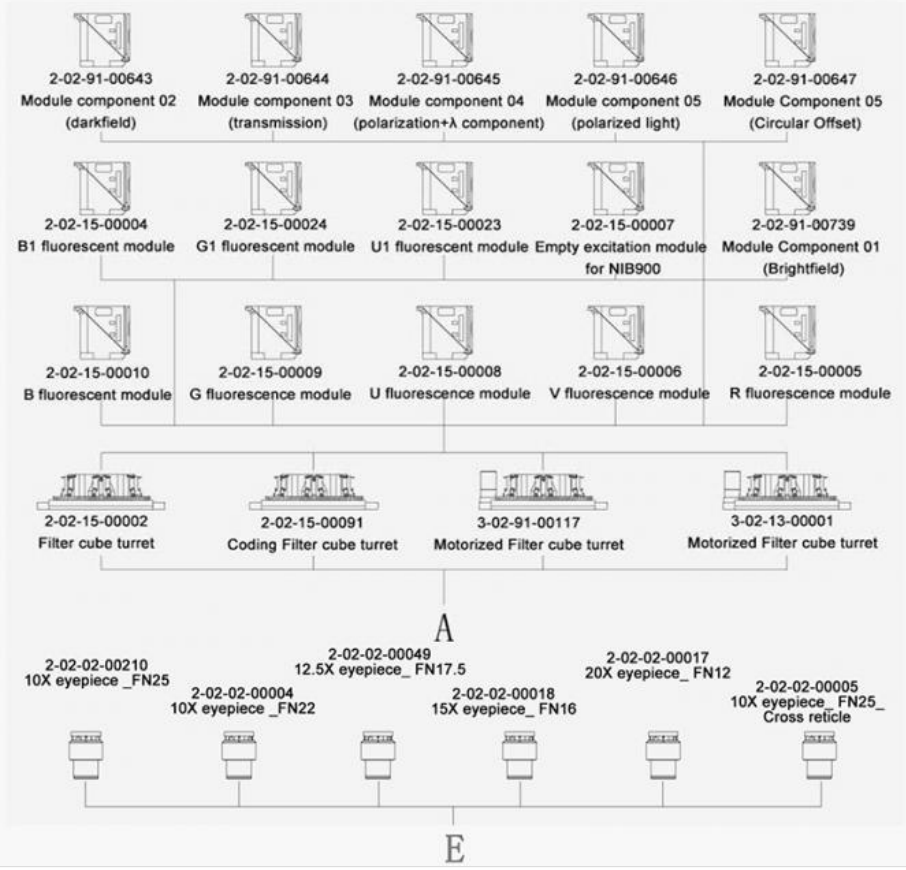
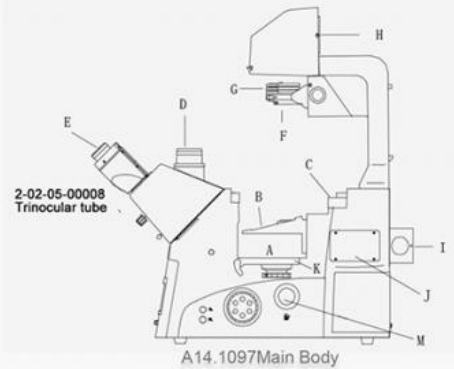
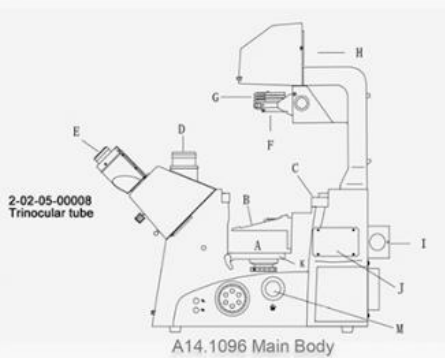
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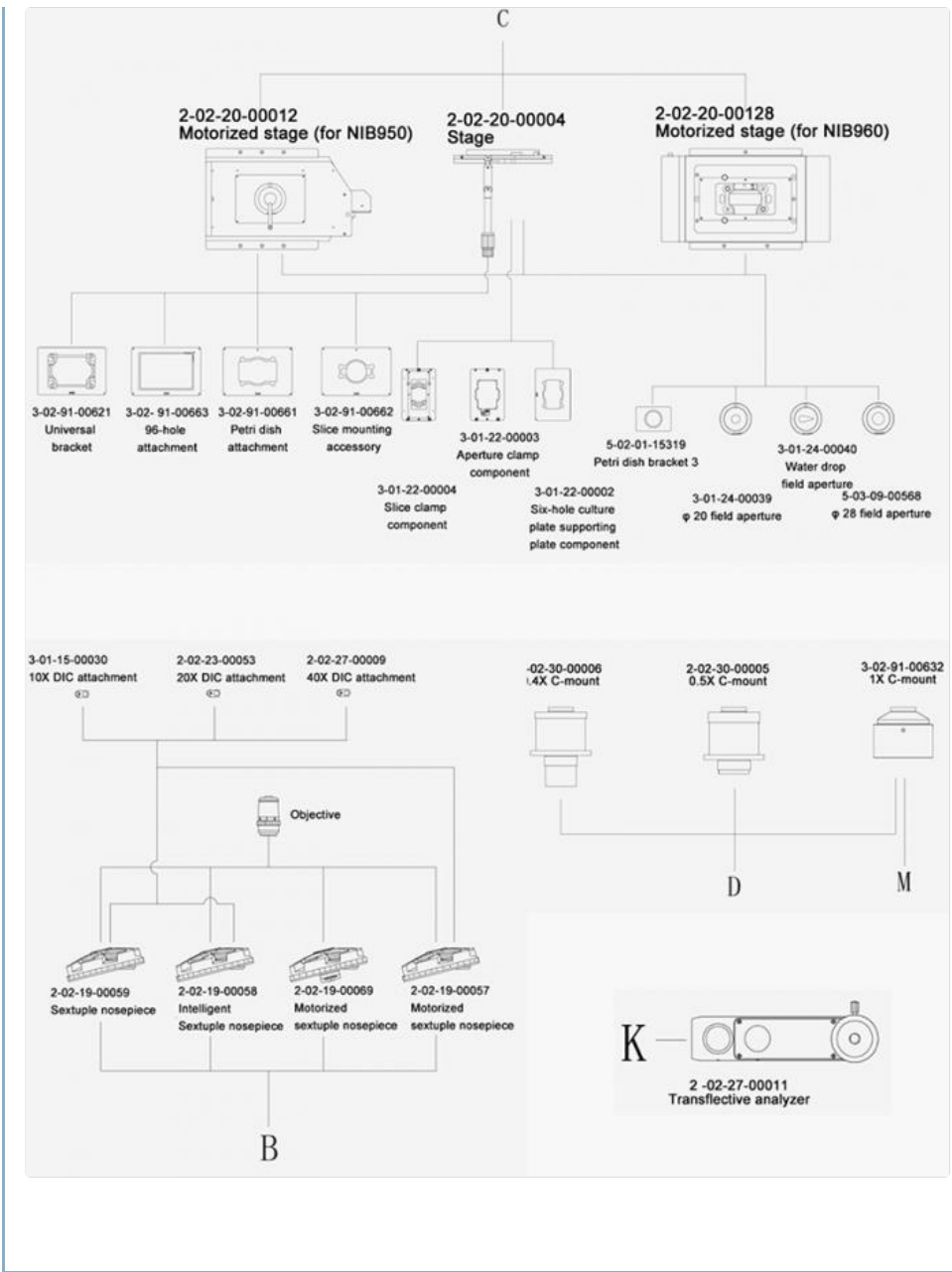


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Opto-Edu (Beijing) Co., Ltd.

☎ 0086 13911110627

✉ sale@optoedu.com

🌐 cnoec.com

F-1501 Wanda Plaza, No. 18 Shijingshan Road, Beijing 100043, China