

# EXC-500 Series

Laboratory Microscope



## ACCU-SCOPE®

MICROSCOPY & IMAGING SOLUTIONS



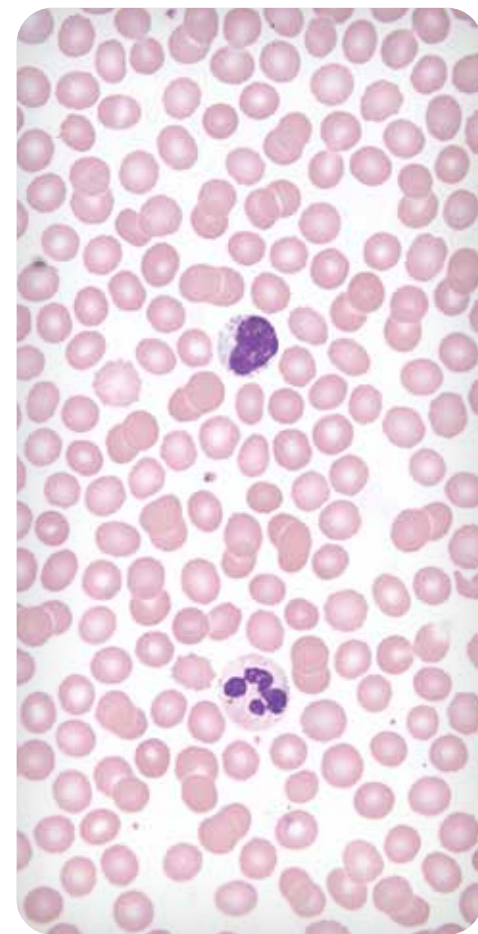
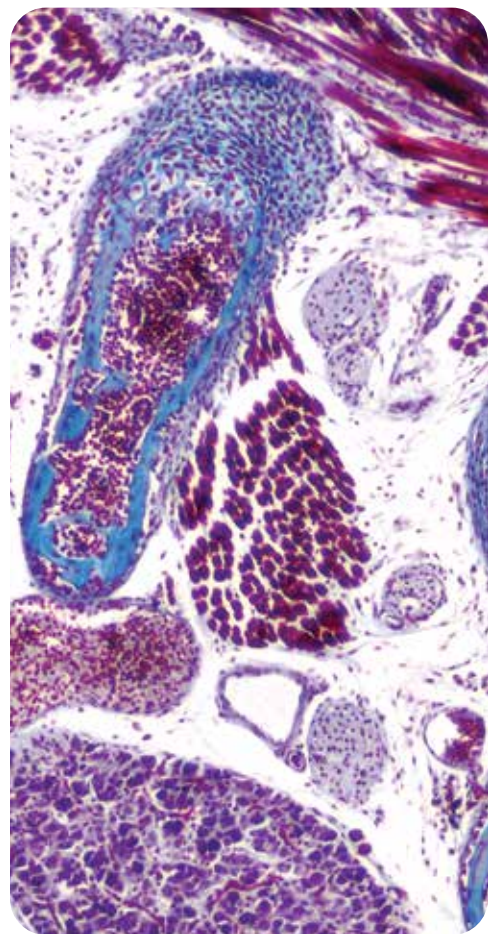
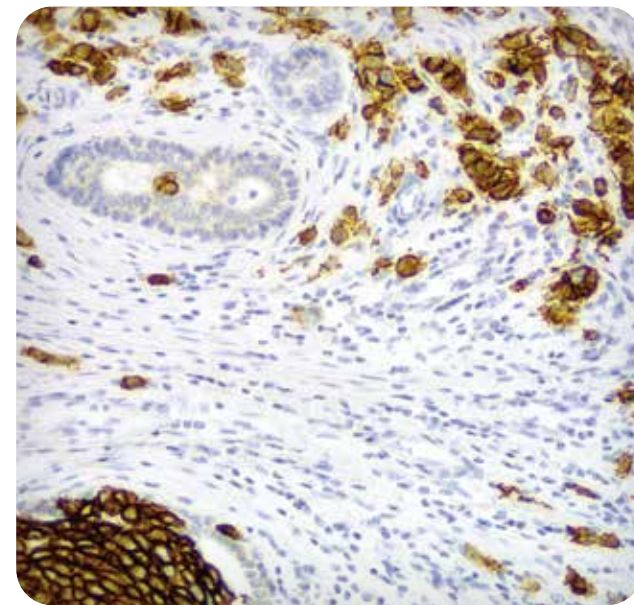
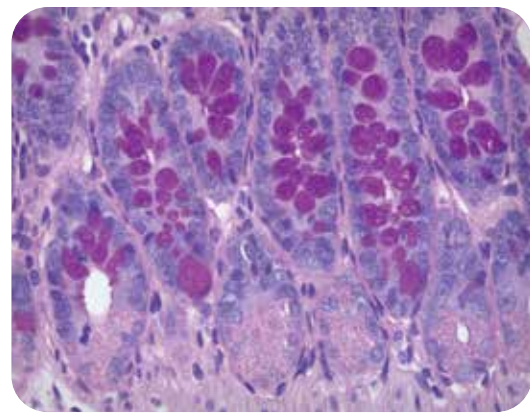
### Empowering Discovery. Advancing Results.

# Next Generation Microscopy and Imaging Solutions

## The Preferred Laboratory Microscope Platform

As a market leader in quality microscopy and imaging solutions, ACCU-SCOPE blends precision, performance and outstanding value like no other manufacturer can. We deliver superb yet affordable optical instrumentation and microscopy innovations that help advance the work, improve the outcomes and empower the achievements of the demanding professionals we're privileged to serve. No matter your industry, discipline or individual endeavor, count on ACCU-SCOPE microscopy, imaging solutions and accessories to exceed expectation as you achieve your goals.





# Tremendous Flexibility and Modularity



**1**  
Fixed and ergonomic  
binocular and trinocular  
viewing heads available



**2**  
6-position  
ball-bearing nosepiece  
with analyzer slot



**3**  
Optional fluorescence  
and multi-viewing  
accessories available



**4**  
Ultra-smooth black or  
white stage; special flat  
pathology stage



**5**  
Polarizer and analyzer  
options for polarized light,  
Gout and DIC



**6**  
Ergonomic low-positioned  
controls for stage, focus,  
intensity and field diaphragm



**7**  
Wide variety of brightfield,  
darkfield, DIC, and phase  
contrast condensers available



**8**  
3W LED illumination



**9**  
Eco-illumination with  
auto-off when not in use



# Motorized EXC-500 Microscope System

The EXC-500-MOT delivers the convenience of motorized focus and a motorized objective nosepiece to the EXC-500 – a motorized stage is optional. The EXC-500-MOT operates as a traditional microscope with the added convenience of push-button objective selection from the front LCD screen, light intensity management and auto-escape for easy stage access when changing slides.

## Intelligent LCD Display

The programmable LCD display of the EXC-500-MOT gives you instantaneous status on the objective position, focus position, illumination intensity, and more. Change objectives just by touching an icon. Automatic focus compensation ensures your sample is in focus with every objective change. Z-limits eliminate crashing objectives into slides. The EXC-500-MOT intelligently manages light intensity between objectives.

## HOT Buttons

Hot buttons are conveniently located near the focus controls and allow fast changing of objectives and focus sensitivity without removing your eyes from the microscope. Adjust the focusing speed. Quickly change objectives. Press the ESC button to lower the stage for easy specimen loading or addition of immersion oil.

## Motorized Stage

The EXC-500's optional motorized stage features traditional stage stalks for a true, drive-by-wire experience during sample movement. Coupled with our ACCU-SlideRP remote pathology software, the motorized stage allows a remote user to reposition the specimen.

## ACCU-SlideRP

The optional ACCU-SlideRP remote pathology software enables seamless automation and scanning, whether the user is sitting at the microscope or located remotely. ACCU-SlideRP allows the remote user to select the objective magnification, move the stage, adjust the microscope light intensity, capture, annotate, and measure images. ACCU-SlideRP requires a trinocular port with a compatible camera and a Windows PC. Remote functionality also requires a network connection.



# Customize Your EXC-500



## Precision Stages

Position your samples with your option of black or white 3-plate stages (right or left-handed), a special flat pathology stage or a motorized stage.



## Brilliant Optics

With objectives from 2X to 100X oil immersion, you choose the best optics for your application.



## Fluorescence Illumination

Add a fluorescence solution with 1, 2 or 3 channel integrated LEDs or a 6-position filter turret accepting today's LED and solid state light sources.



## Contrast Methods

Expand the capability of your EXC-500 with optional contrast methods. Options include phase contrast, darkfield, DIC and polarized light (e.g., Gout analysis), observation. Brightfield is a standard configuration.



## Cameras & Imaging

Add a camera for documentation, consultation or training. Choose a trinocular viewing head or the video port intermediate accessory for camera attachment.



## Extended Ergonomics

Maximize comfort and performance with ergonomic viewing heads. Reduce shoulder strain with nosepiece spacers.

# Multi-Observer Solutions

The EXC-500 can support multiple observers from 2 to 10. Add a camera to extend sharing and instruction capabilities beyond the microscope.



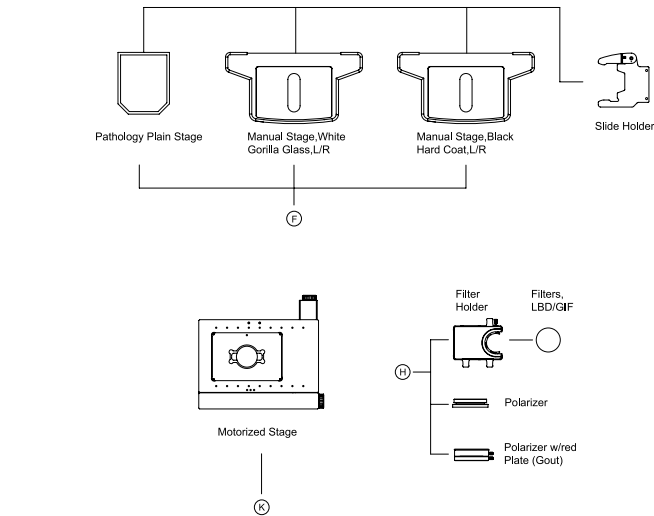
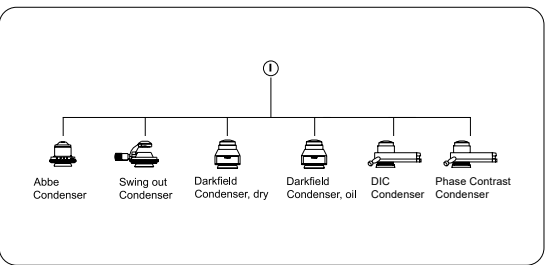
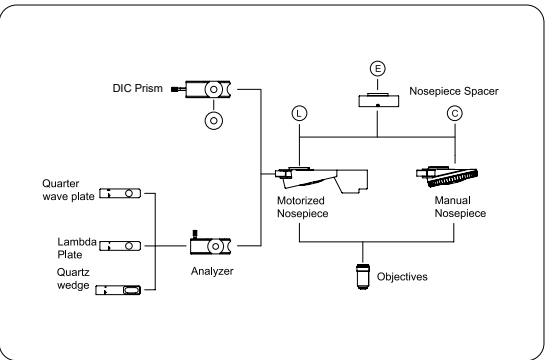
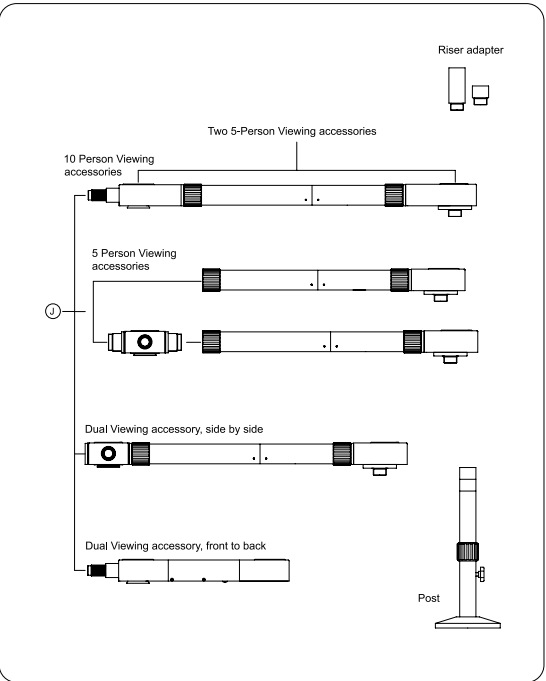
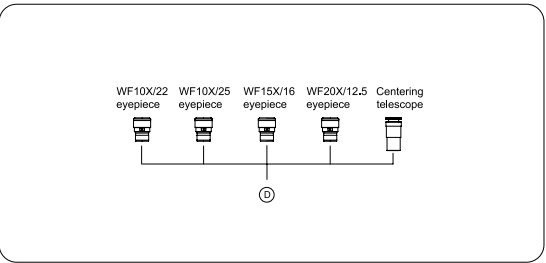
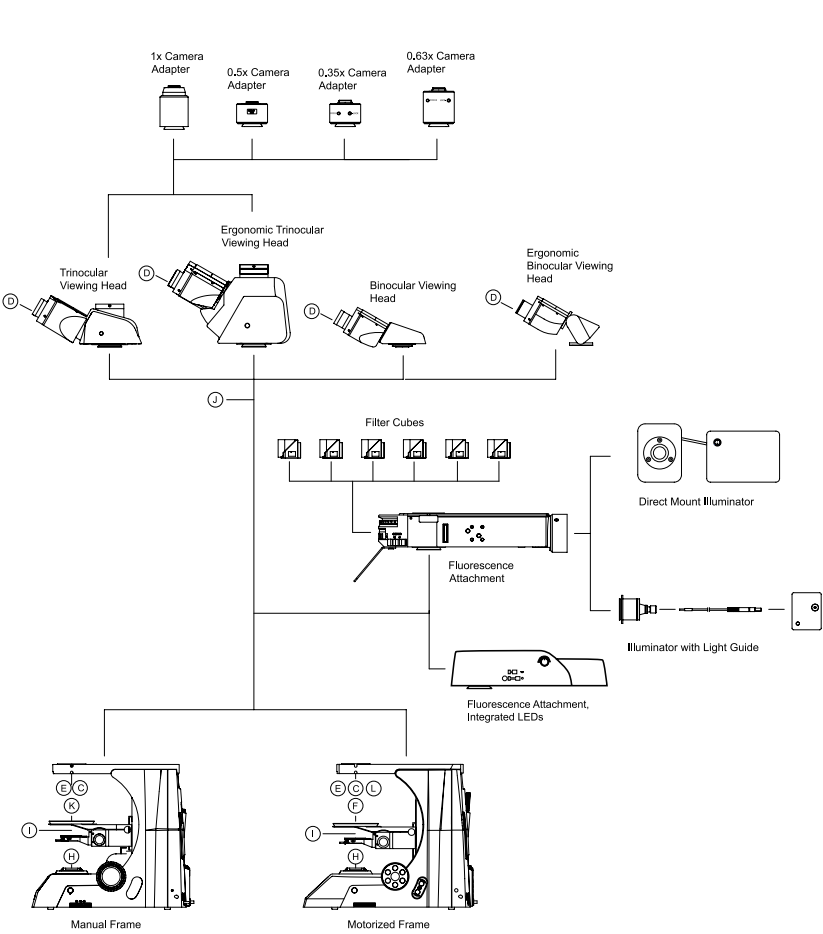
# Objectives



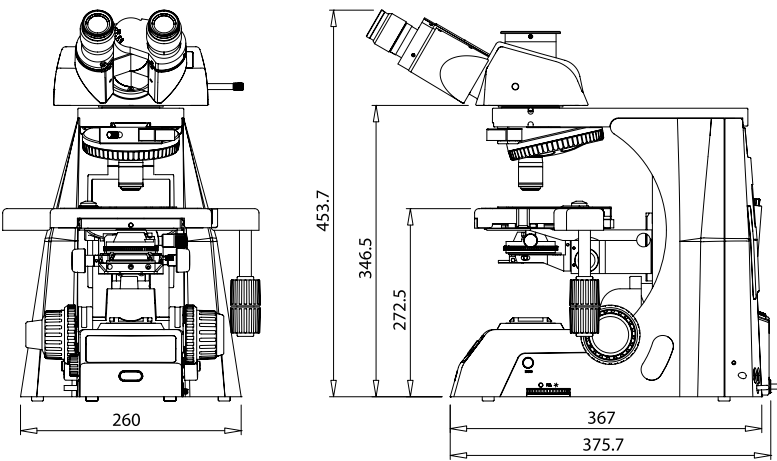
The key to quality images is the optics. ACCU-SCOPE offers a wide range of objectives to meet the performance requirements of many contrast methods.

	NA	WD (mm)	Immersion	Cover Glass Thickness (mm)	Iris	Spring Loaded	Brightfield	Fluorescence	Darkfield	Phase Contrast	DIC
2x PLAN	0.06	7.5		—			●	●			
4x PLAN	0.10	30.0		—			●	●	●		
10x PLAN	0.25	10.2		—			●	●	●		●
20x PLAN	0.40	12.0		0.17			●	●	●		●
40x PLAN	0.65	0.70		0.17		●	●	●	●		●
50x PLAN	0.95	0.19	Oil	0.17		●	●	●			
60x PLAN	0.80	0.30		0.17		●	●	●	●		
100x PLAN	1.25	0.20	Oil	0.17		●	●	●			●
100x PLAN	0.50-1.25	0.20	Oil	0.17	●		●	●	●		●
10x PLAN PH	0.25	10.2		—			●	●		●	
20x PLAN PH	0.40	12.0		0.17			●	●		●	
40x PLAN PH	0.65	0.70		0.17		●	●	●		●	
100x PLAN PH	1.25	0.20	Oil	0.17		●	●	●		●	
4x PLAN S-APO	0.13	16.5		—			●	●	●		
10x PLAN S-APO	0.30	8.1		—			●	●	●		●
20x PLAN S-APO	0.60	2.10		0.17			●	●	●		●
40x PLAN S-APO	0.75	0.70		0.17		●	●	●	●		●
100x PLAN S-APO	1.30	0.15	Oil	0.17		●	●	●			●
10x APO	0.45	4.0		—			●	●			●
20x APO	0.75	1.1		0.17			●	●			●
40x APO	0.95	0.21		0.11-0.23			●	●			●
60x APO	1.40	0.25	Oil	0.17		●	●	●			
100x APO	1.45	0.13	Oil	0.17		●	●	●			●

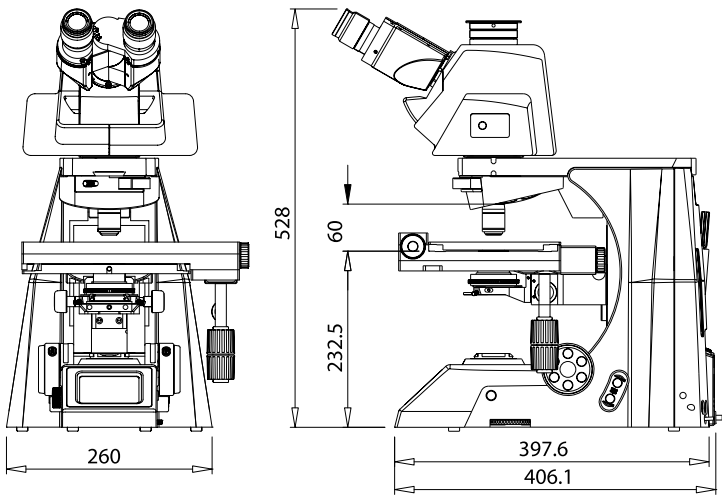
EXC-500 System Diagram



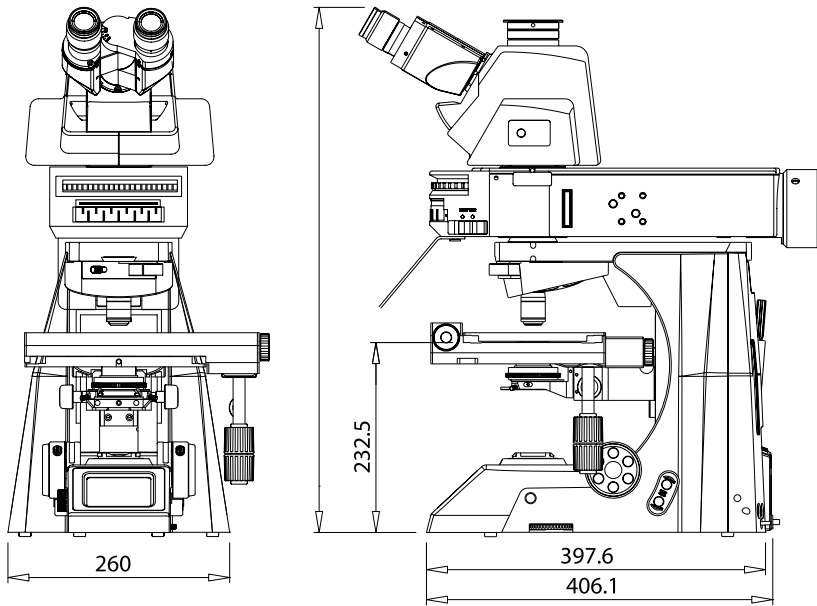
EXC-500 Dimensional Drawing



Configured with Ergonomic Trinocular Tube



Configured with Ergonomic Trinocular Tube with Intermediate Accessory



# EXC-500 Laboratory Microscope

## EXC-500 SPECIFICATIONS

Specifications	EXC-500 Manual	EXC-500 Motorized
Optical System	NIS Infinity Optical System, f=200mm	
Viewing Heads	Binocular or trinocular (0:100, 100:0, 80:20 split), 30° incline; Ergonomic (0° to 35° adjustment angle) binocular or trinocular (0:100, 100:0, 80:20 split); rotatable 360°; interpupillary distance adjustment 47-78mm	
Multi-Viewing Options	Two head (front-to-back or side-by-side); Three head; Five head; Ten head	
Objectives	Plan Achromat 2x, 4x, 10x, 20x, 40xR*, 50xR* oil immersion, 60xR*, 100xR* oil immersion; Plan semi-Apochromatic 4x, 10x, 20x, 40xR*, 100xR* oil immersion; Plan Apochromatic 10x, 20x, 40x, 60xR* oil immersion, 100xR* oil immersion; Plan Phase 10x, 20x, 40xR*, 100xR* oil immersion (*spring loaded)	
Eyepieces	WF10x/22mm focusing eyepiece; WF10x/25mm focusing eyepiece; WF15x/16mm focusing eyepiece; WF20x/12.5mm focusing eyepiece; Ø30mm I.D. eyetubes	
Nosepiece	Reversed sextuple ball-bearing nosepiece with analyzer slot; accepts M25 threaded objectives; Nosepiece spacer (20mm or 40mm), lowers nosepiece and stage	Motorized reversed sextuple nosepiece with analyzer slot; accepts M25 threaded objectives
Focusing System	Coaxial focusing system with adjustable tension control and upper limit stop; all metal gears, brass fine focus gear	Motorized focus
Stand	Cast aluminum alloy	
Stages	Mechanical stage (X-Y travel 78mm x 54mm) with adjustable tension controls; • White Gorilla glass insert, right or left-handed X-Y controls • Black hard-coated, right or left-handed X-Y controls Plain Pathology stage (no X-Y controls) Motorized stage with right-handed, drive-by-wire X-Y stage controls; stage control box; dual slide holder	
Condenser	Swing-out Achromat condenser with iris diaphragm, N.A. 0.9/1.25 (2x-100x) Abbe condenser with iris diaphragm, N.A. 0.9 6-position phase contrast turret condenser, BF & DF positions (10x, 20x 40x & 100x phase annuli) DIC condenser with iris diaphragm, swing out top lens, N.A. 0.9/1.25 (2X-100X); DIC prisms for 10X-100X	
Illumination	3W LED Eco-illumination with variable intensity control, 25,000+ hour bulb life	
Fluorescence	Optional: 6-position epi-fluorescence illumination attachment accepts a variety of solid-state light sources; 1-, 2- and 3-channel epi-fluorescence attachment with integrated LEDs	
Observation Methods	Brightfield, Darkfield, Phase contrast, Polarization, Fluorescence, DIC	
Power	Input: 100-240V 0.5A	Input: 100-240V 1.5A
Weight (approx.)	30lbs. (standard configuration with fixed binocular viewing head)	36lbs. (standard configuration with fixed trinocular viewing head and motorized stage)



MICROSCOPY & IMAGING SOLUTIONS



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<b>WARNING</b>		READ THE CORRESPONDING MANUAL CAREFULLY TO ENSURE CORRECT USAGE OF ALL PRODUCTS		

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