Motic®

# PX43MET Inverted Microscope

## Infinity Plan Semi-Apochromatic Bright and Dark Field Objectives

The PX43MET makes use of a CCIS infinity optical system to provide you with brightfield, darkfield, and inverted microscopy. Along with its ultra-long working distance objective lens, PX43MET offers multi-method, flexible metallographic examination.

The high transmittance objective lenses are made with multi-layer coating, which greatly improves contrast and displays an observed image with high brightness and clarity.

| | N.A. | W.D.(mm) |
|---|---|---|
| Plan S-APO 5X | 0.15 | 18 |
| Plan S-APO 10X | 0.30 | 11.9 |
| Plan S-APO 20X | 0.50 | 2.9 |
| LPlan S-APO 50X | 0.55 | 8.05 |

## Mechanical moving stage

The PX43MET microscope's unique three-layer stage and movable handle design make it more convenient for you to move specimens, which greatly improves observation efficiency and comfort of use.

The 320mmx194mm large-area stage allows you to choose a wider range of specimens. The hard-coated surface is anti-corrosive and wear resistant. The stage stroke is 50X50mm to ensure sufficient operating distance for the user.

## Eyepieces

With the Motic infinity chromatic aberration corrected CCIS optical system, the PX43MET shows you a flat 22mm field of view. The high eye point eyepieces ensure crisp image color and clear image quality, while reducing visual fatigue. Diopter adjustment allows users to obtain the best viewing effect for their eyes.

## Nosepiece

Motic's newly designed quintuple nosepiece ensures precise positioning when changing the objective lenses. The inclined position of the objectives allows you to easily read the objective info while working, and allows for ergonomic access to change magnification.

## Illumination

The PX43MET supports brightfield, darkfield and polarized light observation.

In the standard configuration, the PX43MET uses a 12V /100W halogen lamp, which provides ample illumination intensity for its full set of objective lenses. The built-in power supply also saves you valuable work space.

The PX43MET also introduces a new Motic innovation, the "ECO Smart Sense". The infrared sensor built into the stand can detect whether or not there is a user working in front of the microscope. If the user leaves the PX43MET for over 15 minutes, the microscope will automatically switch off; and when the user returns, the sensor will automatically turn on the scope.

The PX43MET microscope fits smartly and seamlessly into your daily routine. The unique anti-glare design when switching from darkfield to brightfield ensures that the instantaneous illumination brightness will not be too strong; and the brightness gradually increases, giving users enough adjustment time to protect their eyes from stray light.

The halogen and LED lighting modules of the PX43MET can be directly replaced, which is a patented design of Motic. LED lighting has low heat generation and is suitable for observing heat-sensitive samples.

## Polarized light and Differential Interference Contrast (DIC)

The PX43MET meets the needs of your polarized light examinations. Simply insert the polarizer and analyzer into the optical path to use. Differential Interference Contrast (DIC) observation provides high-quality images for samples with large depth differences.

# Professional Camera and Software Solutions

Today, professional methods of recording and photographing your samples are playing an increasingly important role in the field of microscopy.

The PX43MET offers a variety of options for you to choose from.

## Microscope Cameras and Photographic Microscopy

Both SLR or DSLR cameras can be used with the PX43MET via camera eyepieces (2.5x or 4x) and adapters. They work together to provide you with clear colors and sharp images.

## Digital Gallery

Motic also offers digital solutions for better recordkeeping. The PX43MET can come packaged with digital cameras and software that allows for easy importing/exporting of sample images. The microscope can be used with our Moticam microscope cameras, which are advanced CMOS cameras that range from 1MP to 20MP. The Motic range of cameras are definitely capable of matching your applications, with a selection of black / white, color, and options with cooled capabilities.

## CCD adapter

With a standard thread size of 38mm, the PX43MET CCD adapters are a brand-new design from Motic, made to guarantee image quality for the microscope's trinocular head. The choice of adapter magnification should be based on the camera capability. Motic offers the following options: 1x, 0.65x, 0.5x.

## Professional Analysis Software

The Motic Analysis Software offers even more advanced methods of measurement, image processing, and report creation. In addition to a full suite of measuring tools, our Motic Analysis Software also offers the following features:

- Live Multi-Focus (Z-stack EDF for manual microscopes)
- Live Tiling (Panorama using manual stages)
- Auto Focus, Auto Count, Auto Segmentation

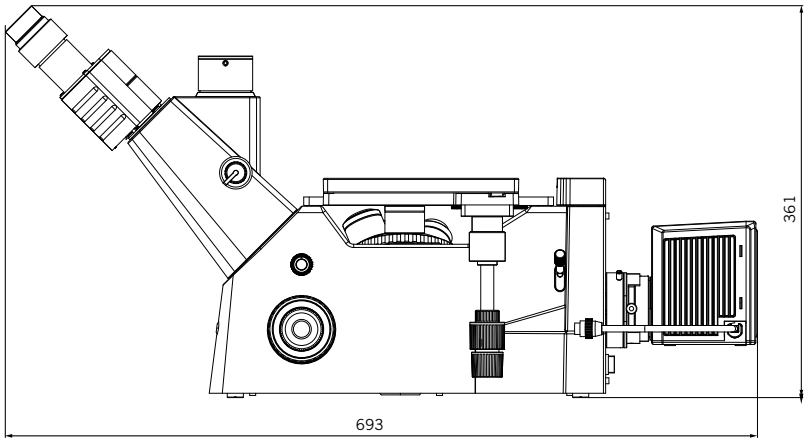
Designed to keep microscopy easy and simple, the Motic Analysis Software can be further customized for you own specific workflow and application.

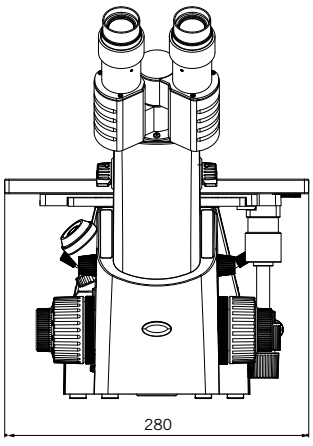
## PX43MET Technical Specifications

| | |
|---|---|
| Optical System | Color Corrected Infinity Optical System (CCIS) |
| Observation Tube | 360° swivel range, height difference 40mm |
| Interpupil Distance | Adjustment range: 48mm to 75mm |
| Eyepieces | UC-WF 10X/FN22 |
| Diopter Adjustment | 5 |
| Trinocular Light Path | 20：80 |
| Nosepiece | Quintuple Revolving Nosepiece |
| Objectives | Plan S-Apo BD 5X；Plan S-Apo BD 10X；<br>Plan S-Apo BD 20X；LPlan S-Apo BD 50X |
| | |
| Stage Size (mm) | Size：320(W) X 194(L) mm，Stroke：50 X 50mm |
| Focus | Course/Fine Focus Knob，Course 42mm/ revolution，Fine 0.2mm/ revolution，0.002mm/ marks |
| Transmitted Light | Reflected Light 100W Light House RL100.00 |
| Electronics | 115 / 230V~，60 / 50Hz Halogen Light：12V / 100W |
| DIC | Optional |
| Analyzer | Optional |
| Polarizer | Optional |

## PX43MET Dimensions Specifications

Unit:mm



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