

# TB Series

Upright Digital Microscopes with Tablet PC



**PATENT PENDING**

The latest Digital Microscopes with Tablet PC from OPTIKA open new microscopy horizons. Our Microscopes combine high end optics with innovative Digital Technology for microscopic imaging.

## Upright Digital Microscopes with Tablet PC

# B-190TB

The B-190 series is the result of a perfect fusion between years of experience in the microscopy field and a refined design study.

This series represents our product philosophy at its best:

**Quality, Reliability and Innovation.** Optika is glad to introduce a new member of this key series: The **B-190TB**.

**Easily detachable  
from the microscope**



**Tilting**



**360°  
Rotating**



**PATENT PENDING**



Just one click to deliver fast, accurate and dependable results.

Enjoy looking at the Tablet PC in a comfortable position.



## B-190TB Model

### **Optical system:**

The optical system has been developed for demanding users; it consists of high quality components which guarantee an high image contrast and an excellent optical resolution. The optical components have been designed and treated with special techniques to prevent the formation of moulds and fungi.

### **Stand:**

The stand has a modern and ergonomic design. It is easy to carry the microscope thanks to the large opening behind the revolving nosepiece, to be used as a handle. The opening allows the user to see clearly the objectives and the samples, as requested in discussion groups.

### **Mechanics:**

The moving parts are made by means of machine tools with computerized numerical control reducing manufacturing tolerance and increasing the reliability of the instrument. The strict controls on materials and production processes are optimized through the procedures established by ISO 9001:2008 quality system.

### **Illumination:**

X-LED type with white LED; light intensity control using a knob on left side of the frame.

LED power 3W, comparable to a 30-35W halogen bulb.

### **Camera:**

Digital camera resolution: 3.14 MegaPixels

Signal output: USB 2.0 - Sensor size: 1/2.5"

Sensor technology: CMOS- Image format: 4/3

Full Image Size: 2048x1536. NO driver (microsoft driver).

Capture fetures: continuous auto exposure, image size, image capture, compressed video capture.

Control parameters: brightness, gain, exposur time, colors, color enhancement.

### **Tablet PC:**

**Equipped with Windows 8.1 operating system.**

**Included: Image Analysis software OPTIKA VISION LITE, full view function is also included for a wider Live Camera view.**

2GB standard memory.

32GB capacity flash memory.

8" screen size.



## Upright Digital Microscopes with Tablet PC

# B-290TB

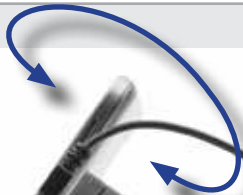
This series incorporates all the experience gathered by OPTIKA Microscopes in the field of light microscopy, adapted specifically for routine laboratory brightfield applications.

These microscopes are suitable for routine microscopy and have an ergonomic design for comfortable long-term use.

Optika is glad to introduce a new member of this key series: The **B-290TB**.

**Tablet PC easily detachable from the microscope**

**360°  
Rotating**



**PATENT PENDING**



# B-290TB Model



## **Optical system:**

The optical system has been developed for demanding users; it consists of high quality components which guarantee an high image contrast and an excellent optical resolution. The optical components have been designed and treated with special techniques to prevent the formation of moulds and fungi.

## **Stand:**

The stand has a modern and ergonomic design. It is easy to move the microscope thanks to the large opening behind the revolving nosepiece, to be used as a handle. The opening allows the user to see clearly the objectives and the samples, as requested in discussion groups.

## **Mechanics:**

The moving parts are made by means of machine tools with computerized numerical control. In this way we have reduced the manufacturing tolerance and increasing the reliability of the instrument. The strict controls on materials and production processes are optimized through the procedures established by ISO 9001:2008 quality system.

## **Illumination:**

X-LED type with white LED; light intensity control using a knob on left side of the frame.

LED power 3.6W, comparable to a 50W halogen bulb.

## **Camera:**

Digital camera resolution: 3.14 MegaPixels

Signal output: USB 2.0 - Sensor size: 1/2.5"

Sensor technology: CMOS- Image format: 4/3

Full Image Size: 2048x1536. NO driver (microsoft driver).

Capture fetures: continuous auto exposure, image size, image capture, compressed video capture.

Control parameters: brightness, gain, exposur time, colors, color enhancement.

## **Tablet PC:**

**Equipped with Windows 8.1 operating system.**

**Included: Image Analysis software OPTIKA VISION LITE, full view function is also included for a wider Live Camera view.**

2GB standard memory.

32GB capacity flash memory.

8" screen size.





## EXCEPTIONAL OPERABILITY

Equipped with an Intel quad-core atom

Battery life up to 8 hours

Battery life up to 4,5 hours in continuous camera live View mode.

**You can detach the tablet and use it as a laptop**

# Acer Iconia W4-820

You can connect a USB keyboard or mouse WiFi and then use as a desktop PC always connected to the microscope



## EXCEPTIONAL ERGONOMICS

You can rotate the tablet on the microscope in all directions, so it can be used as a microscope demonstration.



# Technical specification

## **OPERATING SYSTEM**

OS Windows 8.1

## **PROCESSOR AND CHIPSET**

Processor manufacturer Intel  
 Processor Type Atom  
 Model Z3740  
 Speed 1,33 GHz  
 Processor Core Quad core (4 Core)

## **MEMORY**

Standard Memory 2 GB  
 Memory Technology LPDDR3  
 Memory Card Reader Yes  
 Supported memory microSD

## **STORAGE**

Capacity flash memory 32 GB

## **DISPLAY AND GRAPHICS**

Screen Size 20,3 cm (8")  
 Screen Type LCD color TFT  
 Screen Mode WXGA  
 Screen Resolution 1280 x 800  
 Backlight technology LED  
 Touchscreen Yes  
 Multi-touch screen Yes  
 Graphics Controller Manufacturer Intel  
 Graphics Controller Model HD Graphics  
 Graphics Memory Technology LPDDR3  
 Graphics Memory Accessibility Shared

## **NETWORK & COMMUNICATION**

LAN wireless Yes  
 Wireless LAN standard IEEE 802.11a/g/n  
 Bluetooth Yes  
 Standard Bluetooth Bluetooth 4.0

## **INTERFACES / PORTS**

HDMI Yes

## **INPUT DEVICES**

Keyboard Type Touchscreen

## **BUILT-IN DEVICES**

Microphone Yes

## **SOFTWARE**

Operating System Windows 8.1,  
 Microsoft office,  
 Home & Student 2013

Operating System Architecture 32-bit

Image Analysis software OPTIKA VISION LITE

## **BATTERY INFORMATION**

Number of Cells 2-cell  
 Battery Chemistry Lithium Polymer  
 Battery Capacity 4960 mAh

## **POWER DESCRIPTION**

Maximum Power Supply Wattage 10 W

## **WEIGHT AND DIMENSIONS**

Thickness 11,5 mm  
 Width 219 mm  
 Height 135 mm  
 Weight (Approximate) 415 g



Headquarters and Manufacturing Facilities

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**OPTIKA® S.r.l.** Via Rigla, 30 - 24010 Ponteranica (BG) - ITALIA - Tel.: +39 035.571.392 - Fax: +39 035.571.435 - [info@optikamicroscopes.com](mailto:info@optikamicroscopes.com)

Optika Sales branches

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**OPTIKA® Spain** [spain@optikamicroscopes.com](mailto:spain@optikamicroscopes.com)  
**OPTIKA® China** [china@optikamicroscopes.com](mailto:china@optikamicroscopes.com)

**OPTIKA® USA** [usa@optikamicroscopes.com](mailto:usa@optikamicroscopes.com)  
**OPTIKA® Hungary** [hungary@optikamicroscopes.com](mailto:hungary@optikamicroscopes.com)