

**zumax**

**Zumax Medical**  
*Beyond Vision*

WirelessHM Transmission

VarioDist Lens



**Start your micro-surgery with ZUMAX**  
**OMS2350 DENTAL MICROSCOPE**

## Advantages:

- Integrated LED illumination (patented)
- Integrated Full HD Video camera system
- Balancing Arm
- VarioDist Objective Lens
- 0° -180° inclinable binocular tube with PD adjusting knob
- WirelessHM Full HD Video transmission
- WirelesST Shutter foot control for SLR Camera





## Excellent optics

### **German lenses, multi coatings**

Lens made of imported glass from Germany to reduce the optical aberration. All lenses are multi-coated and anti-reflective.



### **Widefield eyepieces**

The widefield eyepieces are screwed into the tube and have integrated eyecups with stepless adjustment. The eyepieces are perfectly suited for surgeons who wish to work with their eyeglasses on.



### **6-step Magnification Changer**

The magnification changer knobs on both sides of the microscope head allow to quickly and conveniently select the optimum magnification, from an overview of an entire arch to high magnification for precise and close inspection.



example with F=250mm lens and 12.5x eyepiece:

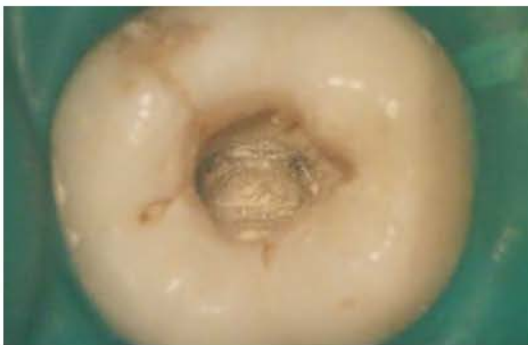
Magnification changer	0.3x	0.5x	0.8x	1.2x	2.0x	3.0x
Magnification	2.8x	4.2x	6.9x	10.4x	17.0x	25.6x
Diameter of Field-of-view (mm)	78	52	32	21	13	9

example with F=250mm lens and 10x eyepiece:

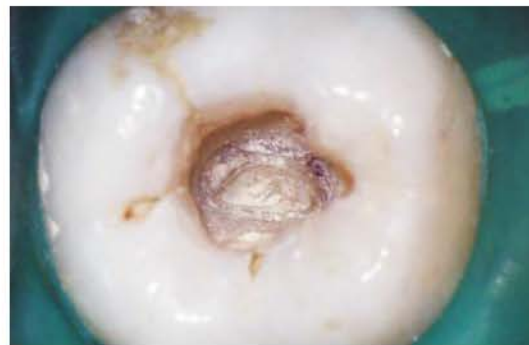
Magnification changer	0.3x	0.5x	0.8x	1.2x	2.0x	3.0x
Magnification	2.2x	3.4x	5.5x	8.3x	13.8x	20.5x
Diameter of Field-of-view (mm)	78	52	32	21	13	9

## LED Illumination

LEDs present many advantages over Halogen or Xenon light sources including lower energy consumption, longer lifetime, improved robustness and greater durability and reliability. In addition LEDs operate at a safe, low voltage, instead of the 25K volts commonly found in xenon lighting, but also have a light temperature characteristic of natural daylight.



Halogen light



LED light

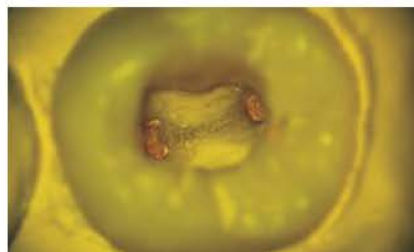
## Integrated Yellow and Green Filter

**Yellow filter:** Prevents premature curing of composite.

**Green filter:** Improves detail visibility by enhancing the contrast of tissue with a strong blood supply.



Without Filter



Yellow Filter



Green Filter

# Perfect Ergonomics

## 0° -180° inclinable binocular tube

Inclinable binoculars feature the widest range of any binocular for user comfort.



## Balancing Arm

This Balancing Arm assures a ultra-smooth, fluid and perfect balance during repositioning of the microscope, even when an external camera has been attached.



## Rotatable Handgrip

The rotatable handgrip can be adjusted to any position and enables the user to easily move the OMS head.



## Pendulum Function

This function allows to remain in an upright viewing position, by changing the direction of the optic pod without changing the direction of the binocular head.



Vertical position



25° right inclination



25° left inclination



*Image courtesy of Prof Peet Van der Vyver, South Africa*

## Available with Integrated Video Camera System



**Integrated Full HD camera**

Zumax brings you outstanding HD resolution and superior color performance at the right price. With outstanding performance, the camera delivers native 1080p/60p resolution from HDMI output with increased resolution up to 900 TV lines.



**Integrated Standard Video Camera**

Output: PAL Number of effective pixels: 752 (H) · 582 (V) approx. 440K pixels  
NTSC Number of effective pixels: 768 (H) · 494 (V) approx. 380K pixels



**WirelessHM Full HD Video transmission**

Provides a high-quality, uncompressed wireless link which supports data rates of up to 3 Gbit/s (allowing 1920×1080@60Hz). Range is beyond 50 feet (15m), and latency is less than one millisecond.

## External Photo and Video Solutions



**Adapter for CANON/SONY/NIKON SLR camera**



**Adapter for SONY NEX series camera**



**Adapter for CANON/SONY Digital Camcorders**

## Numerous Accessories



**WirelessST Shutter foot control for SLR Camera**

This wireless shutter remote control by footswitch for SLR cameras allows shutter release without touching the camera. Therefore, problems of infection control and vibration during photography are eliminated.



**Laser Filter**

The filter can be used for the following laser wavelengths:

Diode Laser: 780–830nm;  
Nd-YAG: 1064nm;  
Er-YAG: 2940nm.



**Dual Iris Diaphragm**

Dual iris diaphragm is used to increase the depth of field.

## Recommend Kits

### A. Entry-level kit

- ➔ OMS2350 Basic configuration



## B. Mid-level kit with camera

- ➔ OMS2350 Basic configuration
- ➔ 0° -180° inclinable binocular tube with PD adjusting knob
- ➔ Balancing Arm
- ➔ 30° binocular extender and beam splitter
- ➔ Adapter for SLR camera or Camcorder



### C. Professional level kit

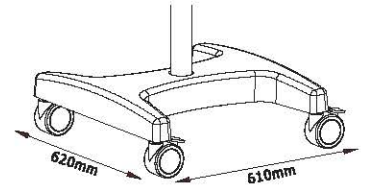
- OMS2350 Basic configuration
- 0° -180° inclinable binocular tube with PD adjusting knob
- Balancing Arm
- 30° binocular extender and beam splitter
- Adapter for SLR camera or Camcorder
- WirelessHM full HD Video transmission
- VarioDist Objective Lens



# Technical Data

## Basic configuration

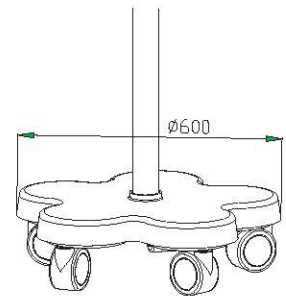
Magnification system	6-step manual magnification changer y=0.33x, 0.5x, 0.8x, 1.22x, 2x, 3x
Tubes	0° -180° inclinable binocular tube, f=170mm
Eyepieces	12.5X wide-field eyepieces; also suitable for eyeglass wearers
Focus	F=250mm with fine focus fine focusing range 12mm
Illumination System	Integrated LED illumination, >60,000Lx Field of view diameter: 50mm with f=250mm objective lens Yellow and green integrated filter
Handgrip	Rotatable Handgrip
Mount mobility	120° coupler
Construction	Floor Stand with "H" shaped base



"H" shaped base

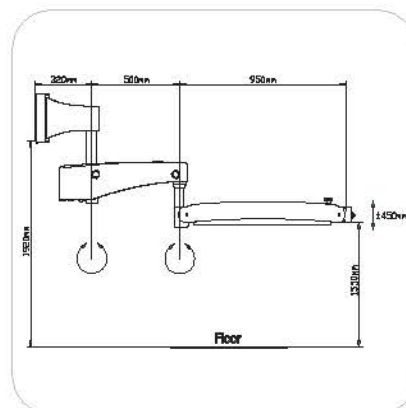
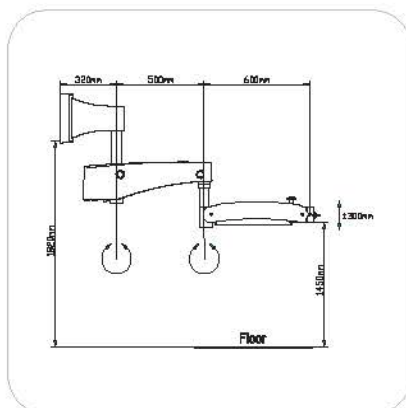
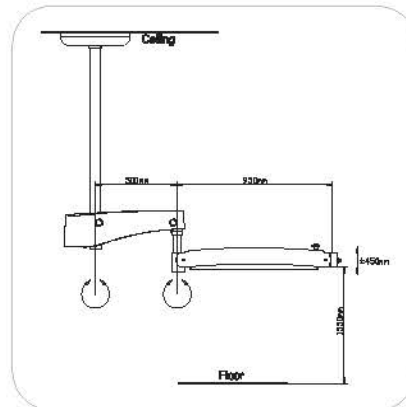
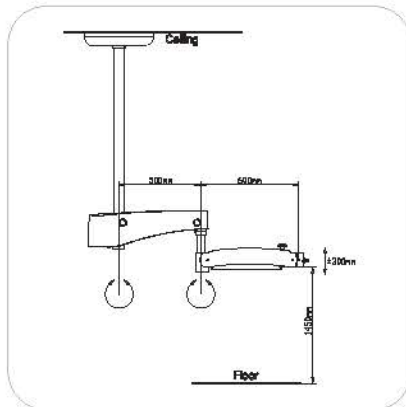
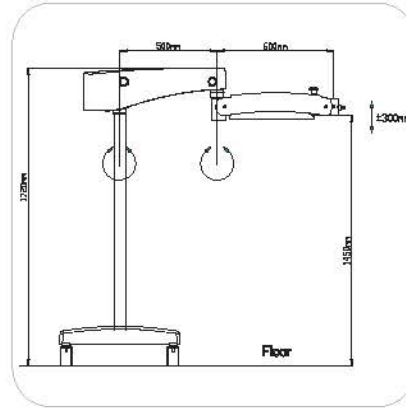
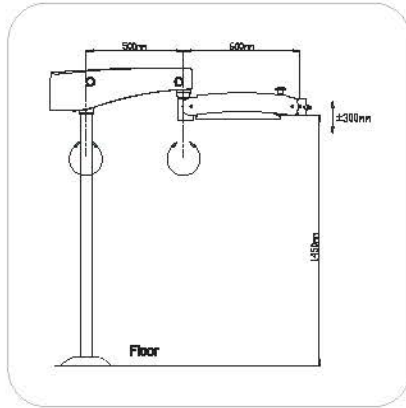
## Optional configuration

Tubes	0° -180° inclinable binocular tube with PD adjusting knob, f=170mm
Eyepieces	12.5X wide-field eyepieces; also suitable for eyeglass wearers
Focus	F=200mm with fine focus F=300mm, f=350mm, f=400mm without fine focus VarioDist Objective Lens, Variable working distance 190-300mm
Handgrip	T-Handgrip
Mount mobility	Balancing Arm
Integrated Video System	Full HD1080p Standard Video Camera WirelessHM full HD Video transmission
External Video Solutions	Adapter for CANON/SONY/NIKON SLR camera Adapter for SONY NEX series camera Adapter for CANON/SONY Digital Camcorders 30° binocular extender and beam Splitter 20%:80% or 50%:50% WirelessST Shutter foot control for SLR Camera
Optics	Double Iris Diaphragm Laser Filter
Construction	Floor Stand with Quincunx shaped base Ceiling Mount, Wall Mount, Fixed Ground Mount or Tabletop Clip



Quincunx shaped base

Compliance  
ISO13485



For more information, please contact:

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