

ZM180 Series Stereomicroscopes provide sharp 3-D imaging.

Model ZM181HF

ZM181HF with extended Pillar/Post mount.

The ZM180 Series Zoom Stereomicroscopes offer smooth, continuous zoom magnification, through the entire 7x - 45xrange. Available with a variety of stand and illumination choices; the standard optical configurations give 7 - 45x with 10x eyepieces. However, the magnification range can vary from 2.1x to 225x depending on the combination of eyepieces and auxiliary objective lenses you select.

We have a ZM Zoom Stereo for you! Available with a wide variety optical, stand and illumination options we have a model for your application. For temperature sensitive work such as fertility or insemination applications, we recommend models with cool-burning fluorescent bottom illumination to eliminate overheating your specimens. As you review the following selections keep in mind the range of eyepieces and auxiliary objective lenses available:

## ZM180 Series Standard Features:

- Continuous Zoom Binocular or Trinocular Heads, 7 45x
- Parfocal Zoom stays in focus over entire zoom range
- Superior optical design with crisp resolution
- Heads rotate 360°, and lock in-place with thumb screws
- Eyepieces are inclined at a 45° angle for viewing comfort
- Dual-Diopter, independent focus controls on each eyetube
- Interpupillary Distance Adjustment of 55 mm to 75 mm
- Working distance of 108 mm (with standard optical configuration)
- All metal head, stand and body construction

## ZM180 Series Options and Accessories:

- Extra-Widefield Eyepieces: 10x, 15x, 20x and 25x
- Auxiliary Objectives: 0.3x, 0.5x, 0.75, 1.5x and 2x
- Magnification range of: 2.1x to 225x depending on optics selected
- Stand Selection: Solid Arm or Pillar/Post Mount
- Illumination choices: Halogen, Fluorescent and Fiber Optics
- Camera Adapters for C-Mount Video or SLR cameras
- Frosted, Clear and Black/White Stage Plates

38

Model ZM184HFT

ZM184 with Trinocular Head and Extender Arm stand.

| Item No. | Description            | Stand        | Illumination         |
|----------|------------------------|--------------|----------------------|
| ZM181    | Binocular Zoom Stereo  | Pillar/Post  | None                 |
| ZM181T   | Trinocular Zoom Stereo | Pillar/Post  | None                 |
| ZM181HF  | Binocular Zoom Stereo  | Pillar/Post  | Halogen (top)        |
|          |                        |              | Fluorescent (bottom) |
| ZM181HFT | Trinocular Zoom Stereo | Pillar/Post  | Halogen (top)        |
|          |                        |              | Fluorescent (bottom) |
| ZM184HF  | Binocular Zoom Stereo  | Extender Arm | Halogen (top)        |
|          |                        |              | Fluorescent (bottom) |
| ZM184HFT | Trinocular Zoom Stereo | Extender Arm | Halogen (top)        |
|          |                        |              | Fluorescent (bottom) |

# **Optical Accessories for the ZM Series**

| Item No. | Description                            |
|----------|--|
| D4-1001  | 10x Widefield Eyepiece, each           |
| D4-1002  | 15x Widefield Eyepiece, each           |
| D4-1003  | 20x Widefield Eyepiece, each           |
| D4-1004  | 25x Widefiled Eyepiece, each           |
| D4-2001  | 2x Auxiliary Objective                 |
| D4-2003  | 0.75x Auxiliary Objective              |
| D4-2004  | 0.5x Auxiliary Objective               |
| D4-2005  | 0.3x Auxiliary Objective               |
| D4-8020  | Video Adapter with C-Mount, adjustable |
| D4-8010  | SLR Camera Adapter (requires T-Mount)  |



# Stereo Zoom IVF/ET Microscopes

The ZM188's are configured for IVF/ET, or In Vitro Fertilization Pre-Embryo Transfer.

Using the specially designed microscope, you can place the light source to illuminate from the top (incident), or from the bottom (transmitted). The Diascopic base allows excellent viewing of unstained translucent specimens with transmitted (bottom) illumination. This is accomplished by bouncing the incoming light off a mirror mounted in the base, so the light strikes the specimen at just the right angle to increase contrast and clarity of transparent & translucent specimens.

A special configuration of optics provides a continuous magnification Zoom Range of 10.5X – 67.5X; everything you need for IVF / ET.

Three models of ZM188's are available, a Binocular (ZM188) and Camera-Ready Trinocular (ZM188T) and a Trinocular with digital camera package (ZM188TC).

# **Specifications:**

- Paired 15X High-Eyepoint Eyepieces
- Dual Diopter adjustment on eyepieces
- Zoom range of 10.5X through 67.5X
- Variable intensity cool light source
- Light Source mounts top or bottom, (Diascopic)
- Choose Binocular, or Camera-Ready Trinocular heads
- Trinocular models include C-Mount camera adapter
- Capability to add optional C-Mount cameras
- Large stage with moveable/removable stage clips
- Ability to view large objects on stage
- Dual focus knobs with knurled grips



ZM188T



Fiber Optic Illuminator

## Illuminator Accessories for the ZM Series

| Description   |
|---|
| Fiber Optic Light Power Supply, 115 Volt / 100 Watt |
| Dual Chrome Gooseneck Fiber Optic Light Guides      |
| (requires D4-7004)                                  |
| Fiber Optic Ring Light Guide (requires D4-7004)     |
| Fluorescent Ring Light with adapter for ZM Series   |
| Ring Lamp Bulb, fluorescent                         |
| Halogen Bulb, 6 Volt / 20 Watt                      |
| Fluorescent Bulb, 6 Volt / 5 Watt                   |
|   |



Light source shown installed at rear of base in correct position for IVF. This position is transmitted (bottom) illumination.

| Item No. | Description  |
|----------|--|
| ZM188    | Zoom Binocular IVF / ET Microscope                     |
| ZM188T   | Zoom Trinocular IVF / ET Microscope                    |
| ZM188TC  | Zoom Trinocular IVF /ET Microscope with 5.6 MP Digital |
|          | Camera and image capture software for Windows XP or 7  |

