



# Stereo Microscopes

## 1200ZF & 1200ZH Series



- **Research Level**
- **Zoom Magnification (6.5:1)**
- **Halogen Or Fluorescent Illumination**
- **Precision Optics**

VanGuard 1200ZF & 1200ZH Series Stereo Microscopes feature a zoom magnification range of 7X to 45X (w/ 10X eyepieces). The precision stereo optics produce high-resolution, three-dimensional images. Choose from halogen or fluorescent transmitted illumination. Optional eyepieces and supplementary lenses are available to customize any model for specific magnification requirements.

**Viewing Head.** Binocular or trinocular heads rotate 360° and are inclined at 45°. All models feature interpupillary and dual dioptic adjustment, a large field of view, and a 93mm working distance.

**Eyepieces.** 10X Widefield (DIN) with a field number of 20.

**Zoom Optics.** The 0.7X to 4.5X primary magnification produces a nominal total magnification range of 7X to 45X, when the 10X eyepieces are used. Features smooth-turning, dual, side-mounted zoom controls.

**Pod Ring.** Sturdy design with set screw and 85mm inside diameter.

**Focusing Movement.** Large, knurled knobs drive rack & pinion mechanism for easy, controlled focusing. Also features a slip clutch mechanism to protect the gears, tension control, and 85mm of total vertical travel.

**Upper (Incident) Illumination.** 15W variable quartz halogen reflector light source for maximum light.

**Lower (Transmitted) Illumination.** 15W variable quartz halogen light source on the 1200ZH Series models; 5W cool fluorescent light source on the 1200ZF Series models. 0.75A, 250V fuse.

**Illumination Switch.** 3-Way illumination switch on the 1200ZF Series models allows the upper and lower illumination to be on separately or simultaneously.

**Stage Plate.** Frosted glass stage plate and black/white reversible stage plates come standard with all models.

**Stage Clips.** Locked-on, stainless-steel, spring-loaded stage clips.

**Base.** Stable 255x180mm base fitted with anti-skid rubber feet.

**Body.** Cast-metal, ergonomic body with stain-resistant enamel finish.

**Dimensions.** 255mm (L) x 180mm (W) x 430mm (H); 7.7kg.



Model 1274ZH

## Specifications

|                                       |  |
|---------------------------------------|--|
| <b>Viewing Head:</b>                  | Binocular or Trinocular  |
| <b>Head Rotation:</b>                 | 360°   |
| <b>Head Inclination:</b>              | 45°  |
| <b>Interpupillary Adjustment:</b>     | 55-90mm  |
| <b>Dioptic Adjustment:</b>            | -5 to +5   |
| <b>Eyepiece Magnification:</b>        | 10X Widefield  |
| <b>Eyepiece Field Number:</b>         | 20mm   |
| <b>Optional Eyepieces:</b>            | 15X (Field Diameter: 15mm)<br>20X (Field Diameter: 12mm)   |
| <b>Optional Supplementary Lenses:</b> | 0.5X, 1.0X, 1.5X, & 2.0X   |
| <b>Stereo Zoom Objectives:</b>        | 0.7X to 4.5X   |
| <b>Working Distance:</b>              | 93mm   |
| <b>Pod Ring I.D.:</b>                 | 85mm   |
| <b>Stage Plate:</b>                   | Frosted & Black/White Reversible   |
| <b>Stage Clips:</b>                   | Stainless Steel, Spring-Loaded, Locked-On  |
| <b>Focusing Movement:</b>             | Dual Knobs; Rack & Pinion Assembly; Tension Control;<br>Slip-Clutch Mechanism  |
| <b>Vertical Travel:</b>               | 85mm   |
| <b>Upper Illumination:</b>            | 15W Variable Quartz Halogen  |
| <b>Lower Illumination:</b>            | 15W Variable Quartz Halogen [1200ZH Models]<br>5W Fluorescent [1200ZF Models]  |
| <b>Fuse:</b>                          | 0.75A, 250V  |
| <b>Voltage:</b>                       | 110V [Standard]; 220V [Special Order]  |
| <b>Base Dimensions:</b>               | 255mm x 180mm  |
| <b>Overall Dimensions:</b>            | 255mm (L) x 180mm (W) x 430mm (H)  |
| <b>Weight:</b>                        | 7.7kg  |
| <b>Supplied With:</b>                 | 15W Halogen Lamp (Spare) (cat. no. 1200-15WHL),<br>0.75A, 250V Fuse (Spare) (cat. no. 1200-FS3),<br>Eyecup (2), Dust Cover, Operation Manual |



Model 1271ZF



Model 1273ZH

## Magnification Configurations

| Eyepieces | Supplementary Lens | Zoom Range        | Field of View (mm) | Working Distance (mm) |
|-----------|--------------------|-------------------|--------------------|-----------------------|
| 10X       | 0.5X               | 3.5X to 22.5X     | 57.0 to 8.8        | 150                   |
| 10X       | 1.0X / None        | 7X to 45X         | 28.5 to 4.4        | 93                    |
| 10X       | 1.5X               | 10.5X to 67.5X    | 19.0 to 3.0        | 49                    |
| 10X       | 2.0X               | 14X to 90X        | 14.2 to 2.2        | 34                    |
| 15X       | 0.5X               | 5.25X to 33.75X   | 42.8 to 6.6        | 150                   |
| 15X       | 1.0X / None        | 10.5X to 67.5X    | 22.0 to 3.4        | 93                    |
| 15X       | 1.5X               | 15.75X to 101.25X | 14.2 to 2.2        | 49                    |
| 15X       | 2.0X               | 21X to 135X       | 11.0 to 1.7        | 34                    |
| 20X       | 0.5X               | 7X to 45X         | 34.0 to 5.3        | 150                   |
| 20X       | 1.0X / None        | 14X to 90X        | 17.0 to 2.6        | 93                    |
| 20X       | 1.5X               | 21X to 135X       | 11.0 to 1.7        | 49                    |
| 20X       | 2.0X               | 28X to 180X       | 8.5 to 1.3         | 34                    |

## Ordering Information

Parts & Accessories listed on pages 36-39

### 1200ZF Models

| Model  | Head       | Zoom Range (Primary) | Upper Illumination          | Lower Illumination |
|--------|------------|----------------------|-----------------------------|--------------------|
| 1271ZF | Binocular  | 0.7X to 4.5X         | 15W Variable Quartz Halogen | 5W Fluorescent     |
| 1272ZF | Trinocular | 0.7X to 4.5X         | 15W Variable Quartz Halogen | 5W Fluorescent     |

### 1200ZH Models

| Model  | Head       | Zoom Range (Primary) | Upper Illumination          | Lower Illumination          |
|--------|------------|----------------------|-----------------------------|-----------------------------|
| 1273ZH | Binocular  | 0.7X to 4.5X         | 15W Variable Quartz Halogen | 15W Variable Quartz Halogen |
| 1274ZH | Trinocular | 0.7X to 4.5X         | 15W Variable Quartz Halogen | 15W Variable Quartz Halogen |