



Fluorescence Microscopes

1400FLi Series

Features

- VIOS Infinity-Corrected Optics
- Professional Level
- Fluorescence, Phase Contrast, Darkfield, & Brightfield
- Large, Professional Stand
- 5-Year Warranty

The 1400FLi Series Fluorescence Microscopes are the flagship of the VanGuard line. Combining top performance with highly-advanced features and optics, the 1400FLi Series models produce fluorescence images of the utmost in clarity. Available with brightfield or phase contrast/brightfield/darkfield.

Viewing Head. Trinocular (Seidentopf) heads rotate 360° and are inclined at 30°. Both models feature interpupillary and dioptic adjustment. The heads feature a sliding main prism (20/80 split) to provide full-time imaging when the vertical tube is in use (80% of the image to the vertical tube and 20% to the viewing eyetubes).

Nosepiece. Quintuple, reversed, ball-bearing nosepiece with high-grade lubricant and positive stops. The nosepiece is reversed (inward-facing) to allow for easier manipulation of slides and to aid in keeping the objectives clean.

Objectives. Brightfield/Fluorescence Achromatic objectives come standard on both models. Model 1486FLi features plan achromatic phase contrast objectives. All objectives are made to DIN standards and are coated.

Stage. Delivering a high level of fluid motion control and longevity, the stage measures 160x140mm. Features a removable spring-clip slide holder and a chemical-resistant finish. Motion is controlled by a right-hand, low-position coaxial control and is driven by a rack and pinion system.

Focusing Movement. Coaxial, ultra low-position coarse and fine focus controls feature a 40mm focusing range and are graduated to 2 microns per division. Fitted with tension adjustment and safety autostop.

Condenser. Model 1482FLi comes with a 1.25 N.A. Abbe condenser. Model 1486FLi comes with a 1.25 N.A. Zemike condenser with phase annulus rings for 10X, 20X, 40X, & 100X; also has a "0" setting for brightfield work and a darkfield stop. All condensers are mounted on a rack and pinion focusing mechanism and feature spring-loaded centering knobs and an iris diaphragm with a swing-in filter holder.

Lower Illumination. 20W variable quartz halogen light source. Comes with blue, green (Model 1486FLi only), and dispersion filters. 0.25A, 250V (2 ea.) fuses.

Upper Illumination. Features a 100W HBO mercury light source which is mounted to the rear and is protected by a sturdy, all-metal housing. Lamp is easily focused and centered with the front-mounted lamp viewer. External power supply provides constant, even light and features an electronic timer which automatically logs the amount of time the mercury lamp is in use. 8.0A, 250V (2 ea.) fuses.

Fluorescence Filters. Features a 3-position (2 filter positions and 1 OFF position), sliding, filter cube assembly. Fluorescence models come standard with 2 broadband filters (blue & green). Custom fluorescence filters available on request.



Model 1482FLi

Specifications

Viewing Head:	Trinocular	
Viewing Head Type:	Seidentopf	
Head Rotation:	360°	
Head Inclination:	30°	
Sliding Prism:	80 / 20 Split	
Interpupillary Adjustment:	55-75mm	
Dioptric Adjustment:	-6 to +6	
Eyepiece Magnification:	10X Widefield	
Eyepiece Field Diameter:	18mm	
Optional Eyepieces:	15X (Field Diameter: 13mm) 20X (Field Diameter: 9.5mm)	
Nosepiece:	Quintuple / Reversed	
Objectives:		
Brightfield/Fluorescence: (Achromatic)	4X	[0.10 N.A., 17.0mm W.D., 4.5mm F.O.V.]
	10X	[0.25 N.A., 8.0mm W.D., 1.8mm F.O.V.]
	40X	[0.65 N.A., 0.40mm W.D., 0.45mm F.O.V.]
	100X	[1.25 N.A., 0.25mm W.D., 0.18mm F.O.V.]
Phase Contrast Objectives: (Plan Achromatic)	10X	[0.25 N.A., 8.0mm W.D., 1.8mm F.O.V.]
	20X	[0.40 N.A., 0.50mm W.D., 0.9mm F.O.V.]
	40X	[0.65 N.A., 0.40mm W.D., 0.45mm F.O.V.]
	100X	[1.25 N.A., 0.25mm W.D., 0.18mm F.O.V.]
Fluorescence Filter Cubes:	Blue Broadband (Excitation: 430-490nm, Emission: 520nm+, Dichroic: 500nm) Intended Dyes: FITC, Acridine Orange, & Auramine	
	Green Broadband (Excitation: 480-550nm, Emission: 590nm+, Dichroic: 570nm) Intended Dyes: Ethidium Bromide, Propidium Iodide, & TRITC	
Custom Fluorescence Filters:	Available On Request	
Stage Dimensions:	160x140mm	
Stage Motion:	Right-Hand Coaxial Control / Rack & Pinion Drive	
Stage Movement Range:	50x75mm	
Focusing Movement:	Coaxial Coarse & Fine Controls / Safety Autostop	
Focusing Range:	40mm	
Focusing Graduation:	2 Microns Per Division	
Brightfield Condenser:	1.25 N.A. Abbe Condenser w/ Iris Diaphragm	
Phase Contrast Condenser:	1.25 N.A. Zernike Condenser w/ Iris Diaphragm	
Phase Centering Tool:	Telescoping Eyepiece [Model 1486FLI]	
Lower Illumination:	20W / 6V Variable Quartz Halogen	
Upper Illumination	100W HBO Mercury	
Fuse:	0.25A, 250V (2 ea.) [Microscope] 8.0A, 250V (2 ea.) [External Power Supply]	
Voltage:	110V [Standard]; 220V [Special Order]	
Base:	225x160mm; Anti-Skid Rubber Feet	
Body:	Ergonomic; Stain-Resistant Enamel Finish	
Overall Dimensions:	225mm (L) x 160mm (W) x 465mm (H)	
Weight:	10.7kg	
Supplied With:	20W Halogen Lamp (Spare) (cat. no. 1400-20WHL), Dust Cover, Operation Manual, 0.25A, 250V Fuse (Spare) (cat. no. 1400-FS1), 8.0A, 250V Fuse (Spare) (cat. no. 1400-FS4)	



Model 1482FLi (Side View)



External Power Supply

Ordering Information

Model	Head	Type	Objective Magnification	Objective Type	Upper Illumination	Lower Illumination
1482FLi	Trinocular	Brightfield/ Fluorescence	4X, 10X, 40X, 100X (Oil)	Achromatic	100W HBO Mercury	20W Variable Quartz Halogen
1486FLi	Trinocular	Brightfield/ Fluorescence	4X, 10X, 40X, 100X (Oil)	Achromatic	100W HBO Mercury	20W Variable Quartz Halogen
		Phase Contrast	10X, 20X, 40X, 100X (Oil)	Plan Achromatic		



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