

# Optimax

Imaging Inspection Measurement

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## TIM5

## Materials & metallurgical inspection microscope for inspection & analysis of a wide range of materials

- Range of illumination techniques permit a variety of analysis methods
- Modular design, with a wide range of accessories
- Bright and dark field plan achromatic objectives up to 100x
- Total magnification up to 1000x, with supplied eyepieces



FM 557119

Vision Engineering Ltd has been certified for the quality management system ISO 9001:2008.

# Materials & metallurgical inspection microscope

Whether you want to inspect alloys, plastics, ceramics, or other materials, the TIM5 routine inspection microscope allows both beginners and advanced users to achieve detailed analysis of a wide range of material subjects.

With excellent optical performance and a range of illumination options including brightfield, darkfield and polarised light, TIM5 makes it easy to observe, inspect and analyse a wide range of materials.

- Effortless observation of a wide range of materials
- Total magnification up to 1000x
- Infinity plan achromatic objective options up to 100x.  
Choice of:
  - Brightfield objectives or
  - Combined brightfield & darkfield objectives.
- Choice of illumination:
  - Incident illumination for viewing opaque samples.
  - The addition of transmitted illumination enables viewing of translucent, or transparent subjects.
- Wide range of options included as standard.
- Modular design permits the addition of a range of accessories, including digital image capture and image analysis software.



## Lens options ...

Optical data	
Brightfield (BF) objective lenses	Working distance
EPI infinity plan achromat 5x/NA 0.12 (BF)	15.5mm
EPI infinity plan achromat 10x/NA 0.25 (BF)	10.0mm
EPI infinity plan achromat 20x/NA 0.40 (BF)	5.8mm
EPI infinity plan achromat 50x/NA 0.75 (BF)	0.32mm
EPI infinity plan achromat 100x/NA 0.80 (BF)	2.0mm
Brightfield / darkfield (BF/DF) objective lenses	Working distance
EPI infinity plan achromat 5x/NA 0.12 (BF/DF)	12.0mm
EPI infinity plan achromat 10x/NA 0.25 (BF/DF)	10.0mm
EPI infinity plan achromat 20x/NA 0.40 (BF/DF)	4.3mm
EPI infinity plan achromat 40x/NA 0.60 (BF/DF)	2.9mm
EPI infinity plan achromat 50x/NA 0.75 (BF/DF)	0.32mm
EPI infinity plan achromat 100x/NA 0.80 (BF/DF)	2.0mm

## Digital image capture

C-mount adaptor with a range of digital image capture and reporting options.

● Optional extra

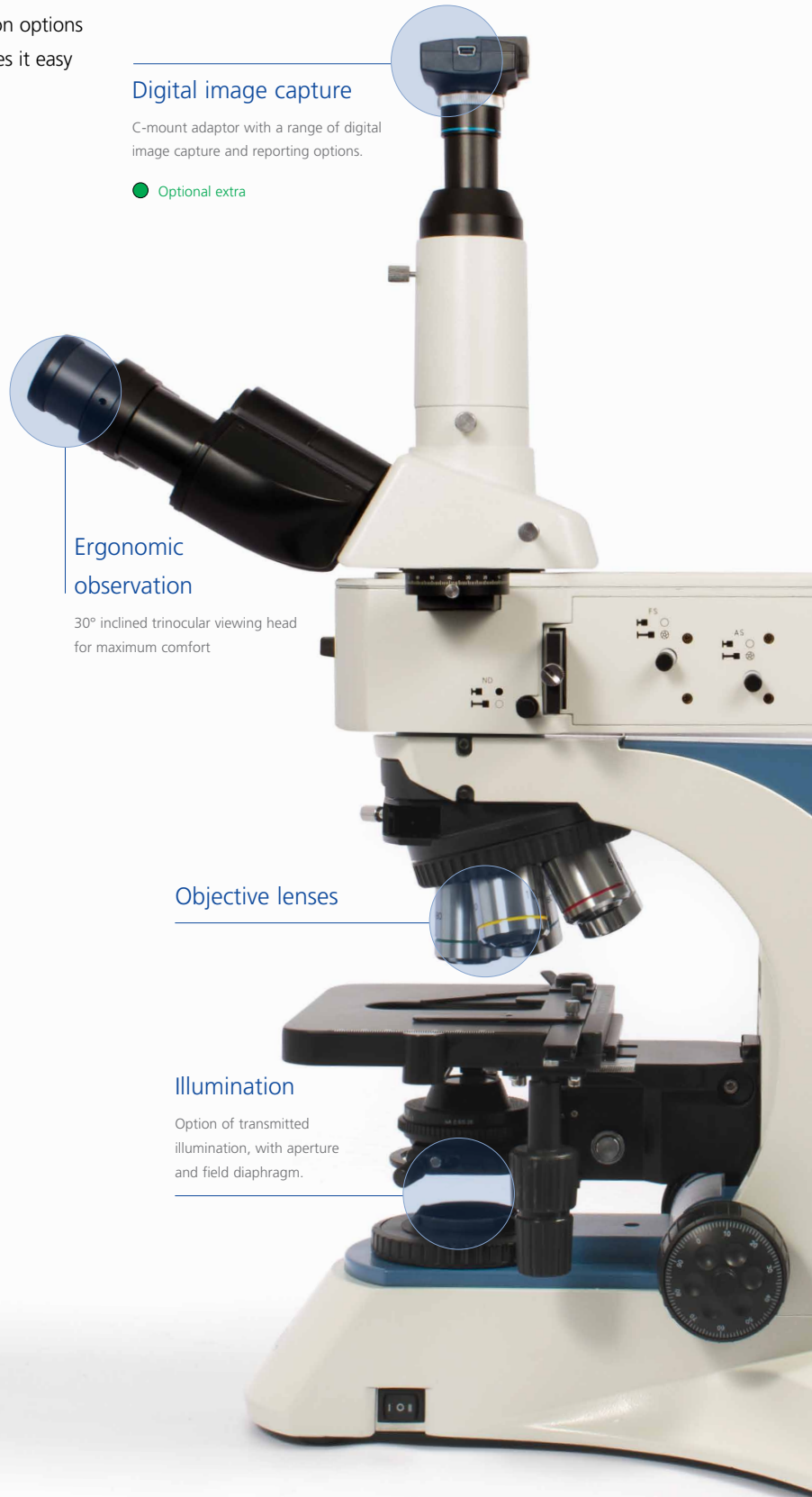
## Ergonomic observation

30° inclined trinocular viewing head for maximum comfort

## Objective lenses

## Illumination

Option of transmitted illumination, with aperture and field diaphragm.





## TIM5

Shown with digital image capture and brightfield / darkfield objectives.

Microscope body	
Optical system	Infinity corrected optical system
Viewing head	30° inclined Siedentopf trinocular viewing head, 360° rotatable
Focus	Coaxial bilateral coarse and fine adjustment with adjustable limit stop
	Sensitivity and graduation of fine focus: 0.001mm
	Torque adjustment for coarse focus control
	Built-in transformer and illumination intensity control
Mechanical stage	186 x 138mm double layer mechanical stage with low positioned right hand X,Y controls for enhanced ergonomic comfort
	75 x 50mm (X,Y) movement
Max. specimen height	50mm (with incident only illumination) 30mm (with incident / transmitted illumination)
Nosepiece	Quintuple reversed revolving nosepiece BF/DF (reducing collars for BF objectives)
Weight	13kg

Eyepieces	
Eyepieces	Wide field 10x/22mm, graticule can be inserted.
Eyepiece tubes	Interpupillary adjustment 48 - 75mm; Dioptre adjustment +/-5

Illumination	
Illuminator	Koehler illumination with adjustable field and aperture diaphragms, BF/DF beam splitter
	24V/100W halogen lamp house
Transmitted illuminator	Koehler illumination
	24V/100W halogen lamp house
	Includes swing-out achromatic condenser N.A. 0.9/0.25

## Standard accessories ...

TIM5 comes with a number of accessories as standard including:

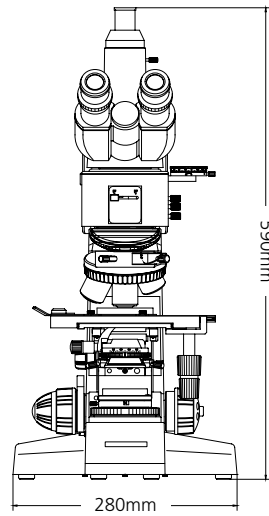
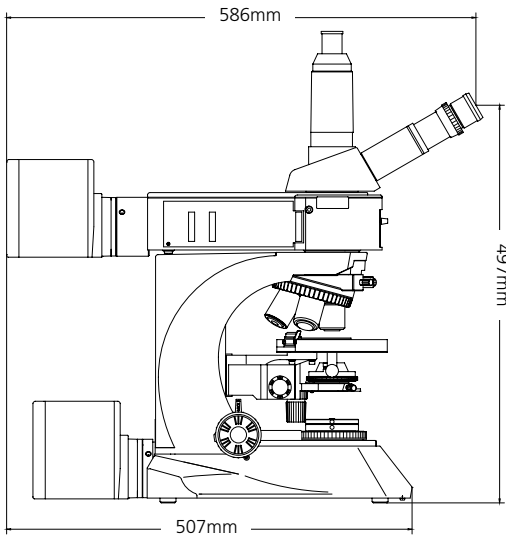
- Filters (incident light): blue; green; yellow
- Filters (transmitted light): blue
- Neutral density filters: ND25, ND6
- Polarising kit: Rotatable analyser 360°
- Camera C-mount adaptor, 0.5x
- Graticule retaining ring



## Options

Camera C-mount adaptor, 1.0x  
Range of digital cameras (Contact us for details)  
Observation & analysis software (Contact us for details)

## Dimensions



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