



**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 9001:2015.

# 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	
<b>Brightfield (BF) objective lenses</b>	<b>Working distance</b>
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
<b>Brightfield / darkfield (BF/DF) objective lenses</b>	<b>Working distance</b>
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

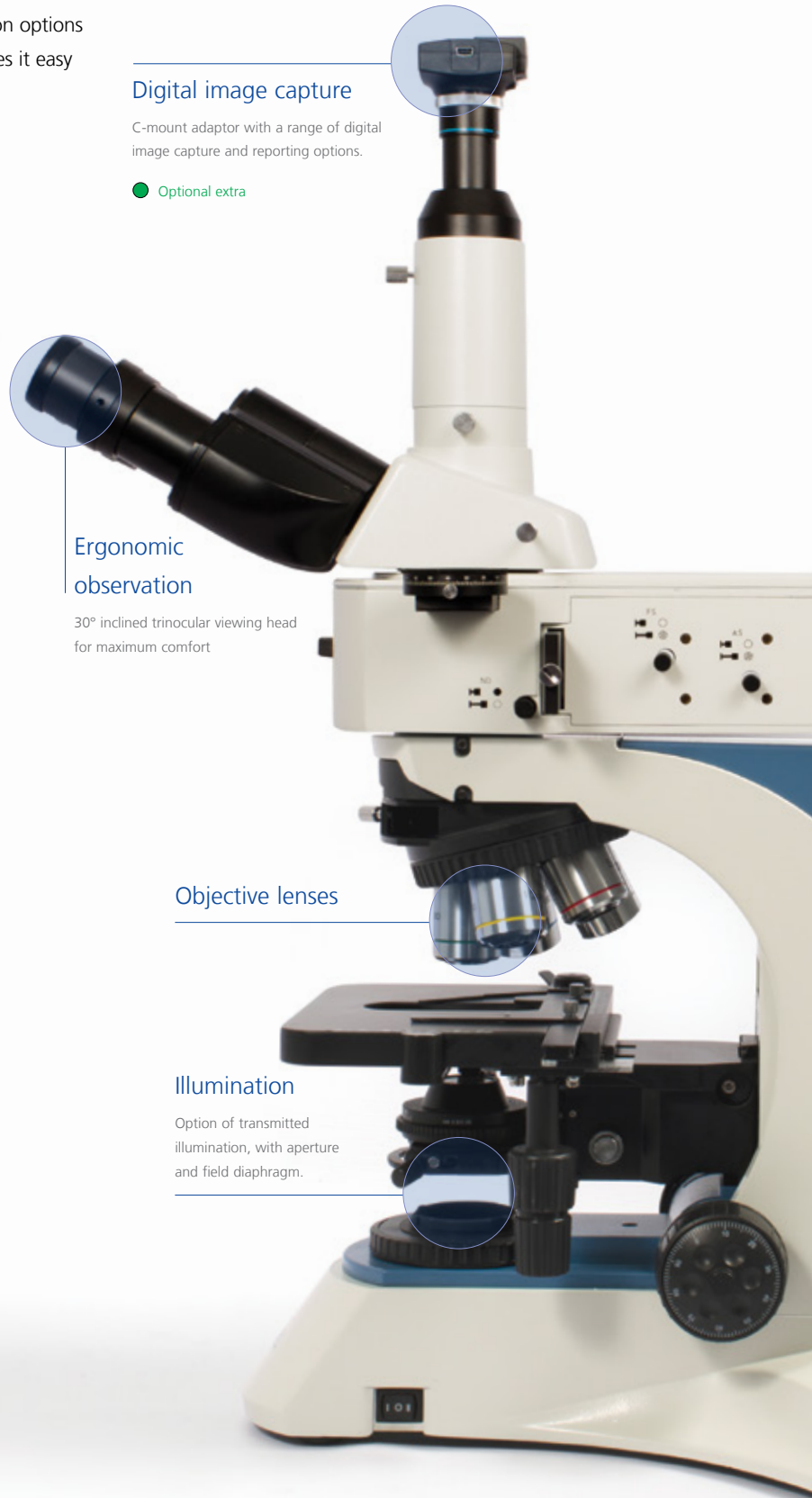
### Ergonomic observation

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 10x22mm, graticule can be inserted.
Eyepiece tubes	Interpupillary adjustment 48 - 75mm; Dioptre adjustment +/-5

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

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

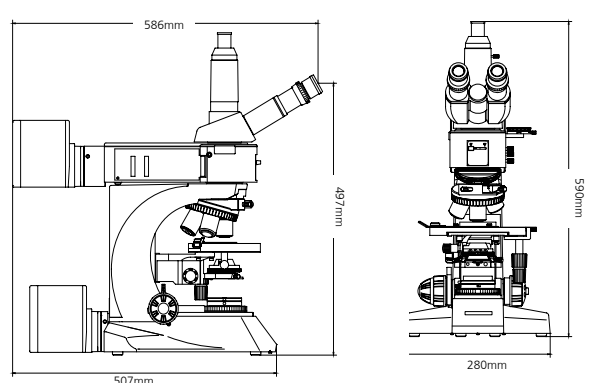
## Standard accessories ...

TIM5 comes with a number of accessories as standard including:

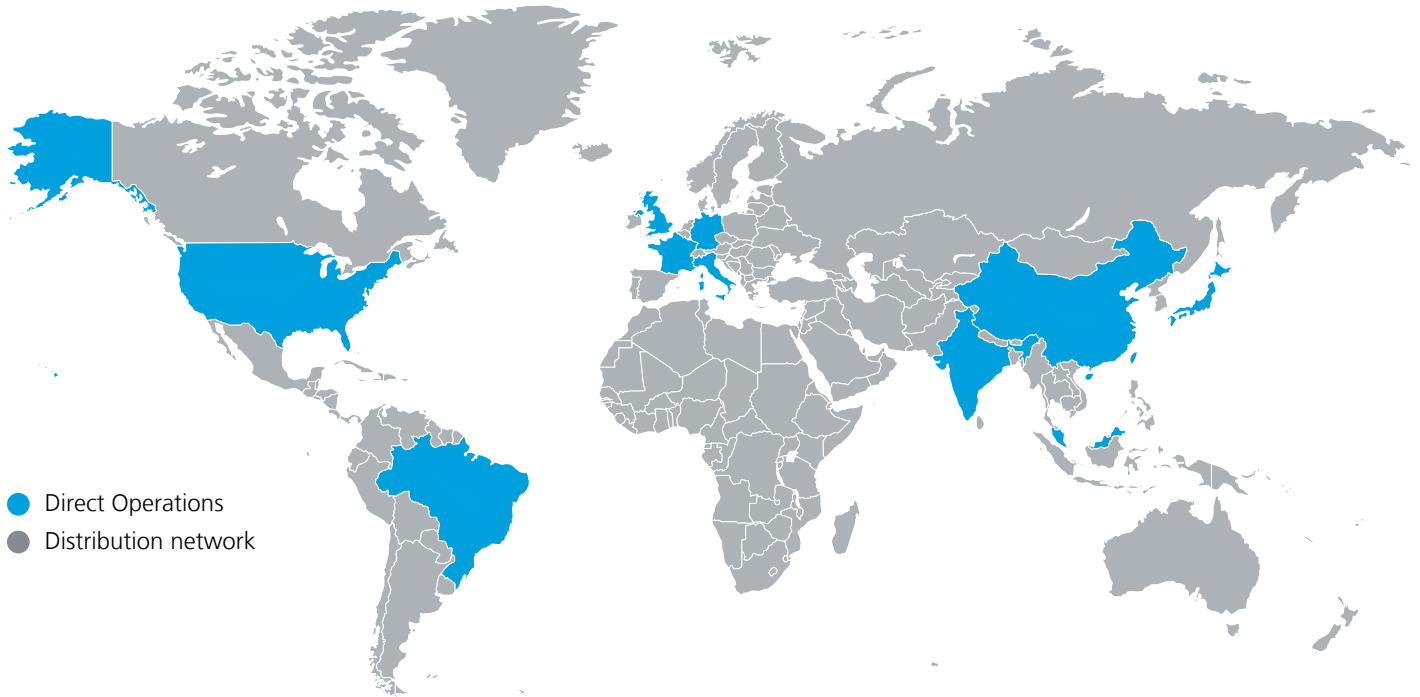
- Filters (incident light): blue; green; yellow
- Filters (transmitted light): blue
- Neutral density filters: ND25, ND6
- Polarising kit: Rotatable analyser 360°
- Camera C-mount adaptor, 0.5x
- Graticule retaining ring



## Dimensions



Vision Engineering is a global manufacturer of ergonomic stereo microscopes, digital inspection systems and optical and video measuring systems.



Since 1958, Vision Engineering has become one of the worlds most innovative and dynamic microscope suppliers.

### For more information...

Vision Engineering has a network of offices and technical distributors around the world. For more information, please contact your Vision Engineering branch, local authorised distributor, or visit our website.

Distributor



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