





Microscopes

CETI Microscopes from Medline... Whatever your application or budget... ...we have the perfect solution

Established in 1992, Medline Scientific specialises in the supply of a wide range of high quality laboratory and medical products for a broad range of customers in the UK and beyond.

Our customers include major national and international distributors, universities, hospital trusts, independent laboratory groups, schools and manufacturing industries.

We aim to provide the highest quality products at the most competitive prices combined with professional customer care and service.

Today, this objective is perfectly illustrated by our extensive range of affordable CETI microscopes which are designed for all popular applications.

Whether you need a basic microscope for simple educational applications or something more sophisticated for research and clinical tasks, you are assured of a model to suit your needs and budget.







Contents

The CETI Microscope range offers an extensive choice of affordable microscopes to suit all budgets. From basic educational needs to the more specialised requirements of the research and clinical scientist, we have the perfect solution.

Our range includes monocular, binocular or trinocular configurations to suit most typical applications and requirements. These use brightfield, phase contrast, darkfield, polarisation or fluorescent light techniques and are supplied with optics ranging from achromatic to infinity corrected planachromatic objectives, depending on the model.

All CETI microscopes are manufactured to the highest specification demanded by the relevant application.





General information	2
Stereo microscopes	3-9
Educational compound microscopes	10-13
Max II microscopes	14-17
Magnum microscopes	18-23
Triton II microscopes	24-26
Inverted microscopes	27-30
Industrial compound microscopes	31-35
Imaging systems	36-40

Complementary products, accessories



General Information

General information

Each microscope has its own unique product code, with 10x eyepieces, objectives, a dust cover and power lead as standard and an extensive range of accessories available to complement each model. This ensures that the ordering process is simplified and a complete working unit is delivered, easily unpacked and rapidly set up for operation upon arrival. The units are shipped in robust Styrofoam packaging in a sturdy cardboard outer case.

All the units are supplied with DIN* (*Deutsche Industrie Normen – an internationally recognised industry standard for microscope objectives) antifungal optics. They are manufactured to the ISO 9002 standard and are fully CE compliant. The objectives range from basic achromatic on the entry level microscopes up to planachromatic infinity corrected on the most advanced models. The mid range models have the option of a choice of objective quality.

Light sources

Daylight: the original method of illumination which uses a mirror to reflect natural light through the condenser system to illuminate the sample. Provided as an option on educational compound microscopes.

Halogen: the traditional light source for viewing samples. Light intensity varies between 10 – 50W.

LED: replaces Halogen illumination with the added benefits of reduced power consumption, enhanced life and no heat emission. Especially important for viewing live samples, LED is also being used for fluorescence microscopy as an alternative to HBO mercury bulbs.

Mercury: the traditional light source for fluorescence microscopy using an HBO 100W bulb.

Illumination techniques

Transmitted: light is shone through the sample. Suitable for transparent and translucent slide mounted samples.

Reflected: light is bounced off the sample. Used for solid materials and fluorescence applications.

Brightfield: light is shone through the sample. Suitable for the viewing of stained slide mounted samples.

Phase contrast: a technique to view artificially stained samples in black and white contrast; most effective when viewing living cells.

Darkfield: an illumination method for highly reflective samples using an oblique light source. When a suitable sample is placed on the stage some of the light is reflected into the objective and so provides illumination of the sample whilst the background remains dark.

Polarisation: used for viewing samples that exhibit a polarising effect due to their structure.

Fluorescent: used for the detection of fluorescence stained samples or where the material emits a natural fluorescence.

Episcopic: top lighting for viewing solid materials.

Diascopic: bottom lighting for viewing transparent and translucent samples

FLUORESCENT FILTERS AND COMPATIBLE FLUOROPHORES

Fluorescent Filter block set	Suitable Fluorophores	
B (blue)	FITC, Alexa 488, EGFP	
G (green)	TRITC, Cy3, Alexa 532, Rhodamine	
UV (ultraviolet)	DAPI	
V (violet)		
RB (royal blue)	Auramine 0, Acridine orange	
Y (yellow)	Texas Red, Alexa 594	
R (red)	Cy5, Alexa 633, Alexa 647	

Educational stereo microscope range

CETI Stereo Microscope Range

Stereo microscopy allows for the study of whole or partial specimens without the need for any pre-treatment even under relatively low magnification. As the models increase in sophistication, additional features add to the functionality and overall ease of use.

These models are supplied with a choice of lighting options of daylight, halogen or LED (model dependent). They are available with a choice of fixed magnifications or use a zoom system for fine tuning. The lighting options are both diascopic and episcopic to enable both translucent and solid sample examination.

Increasingly LED illumination is being substituted for the traditional Halogen light source in our more sophisticated models. LED illumination provides a whiter 'cold' light source which generates no heat; this means live or heat sensitive samples can be viewed for prolonged periods without 'cooking' the sample. CETI has introduced LED illumination from the STAR model upwards.

Student stereo microscopes

The entry level of stereo microscopes with varying illumination sources and magnification ranges introduces students to stereo microscopy. They are also ideal for the keen amateur who wishes to investigate objects in more detail.

These robust microscopes are assembled to the highest technical standards and incorporate an optical system, which due to its transparency quality and depth, establishes these models at the 'top of the class'.

A two-stage focusing system is emplyed with the coarse focus being set by adjusting the optical head on the retort stand; this is then clamped, while fine focusing is performed by the control knob on the optical head.





10P student stereo microscope Product ref. 1111.0010

FEATURES	
Optical head	Binocular, vertical
	Interpupillary distance adjustment (Siedentopf type) 51 to 75 mm
	Dioptric compensation on one eyepiece
Eyepieces	10x/20mm super wide-field
Stage	60 mm Ø Frosted and black / white contrast plate
	2 Stage clips
Focusing device	Coarse focus clamp of optical head onto retort stand
	Fine focus
	A pair of knobs located on each side of the stand
	Rack and pinion system
Objectives	Planachromatic 2x supplied as standard
Packing	Packing dimensions 250x115x170 mm (WxDxH)
	Gross weight 1.3kg
	Eyecups & dust cover

20L student stereo microscope

Product ref. 1111.0020

FEATURES as for 10P with	
Optical head	Binocular, inclined at 45°
Illumination	Variable light intensity
	Episcopic 12V / 10W Tungsten
	12V/10W tungsten bulbs
Main power	220-240V / 50-60Hz
Packing	Packing dimensions 290x120x190 mm (WxDxH)
	Gross weight 2.5kg
	Eyecups & dust cover

Educational stereo microscope range



30 student stereo microscope

Product ref. 1111.0030

FEATURES as for 20L additionally with	
Optical head	Binocular, inclined at 45° and 360° rotatable
Objectives	2x or 4x planachromatic
Stage	95 mm Ø Frosted and black / white contrast plate
	2 Stage clips
Illumination	Variable light intensity
	Episcopic 12V / 10W Tungsten
	Diascopic 12V / 10W Halogen

CODE	DESCRIPTION
	Model
1111.0010	Stereo-10P Simple stereo no illumination
1111.0020	Stereo-20L Simple stereo with illumination
1111.0030	Stereo-30 20x 40x turret with illumination

Our Twin Series of stereo microscopes have a single focus column stand combining rigidity with simplicity to ensure that the focusing stage is a simple, one-step process, with either fixed magnification or built-in zoom facility.



Twin-7 stereo microscope

Product ref. 1111.0007

FEATURES	
Optical head	Binocular, inclined at 45° and 360° rotatable
	Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm
	Dioptric adjustment on one eyepiece
Eyepieces	10x/20mm wide-field
Stage	Frosted and black / white contrast plate
	2 Stage clips
Illumination	Variable light intensity
	Converter built-in low voltage (12V electric)
	Episcopic 12V / 10W Halogen (Fixed settings)
	Diascopic 12V / 10W Halogen (Fixed settings)
Objectives	2x and 4x in turret changer
Main Power	220-240V / 50-60Hz. (Euro connector)
Packing	Styrofoam in cardboard box
	Packing dimensions 34x18x35 cm (WxDxH)
	Gross weight 4kg
	Supplied with 2 rubber eyecups, dust cover and instruction manual

Twin-Z stereo microscope

Product ref. 1111.0003



FEATURES as for Twin 7 additionally with	
Binocular, inclined at 45° and 360° rotatable	
Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm	
Dioptric adjustment on one eyepiece	
Built in zoom control	
10x/20mm wide-field	
Independent variable light intensity	
Converter built-in low voltage (12V electric)	
Episcopic 12V / 10W Halogen (Fixed settings)	
Diascopic 12V / 10W Halogen (Fixed settings)	
1x with Zoom control range 0.7x to 4.5x	

CODE	DESCRIPTION
	Model
1111.0007	Twin 7 20x, 2x, 4x turret double illumination
1111.0003	Twin Z zoom with double illumination

Stereo microscope range

The Star is a stereo microscope which is designed for both educational and professional use. It is particularly well suited to viewing specimens at low magnifications and introduces the benefits of LED lighting into the stereo range of microscopes.

The diamond shaped base with sloping sides provides an ergonomic hand rest during sample manipulation to ensure control and minimise the possibility of damage occurring.



Star-24 LED stereo microscope

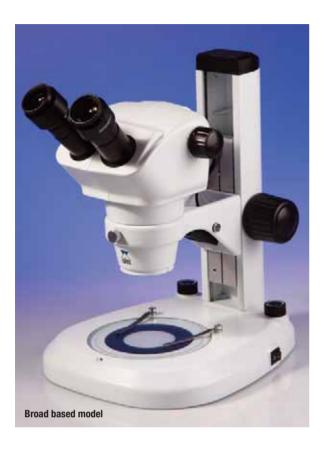
Product ref. 1800.1000

FEATURES	
Optical head	Binocular, inclined at 45°
	Interpupillary distance adjustment (Siedentopf type) 50 to 75 mm
	Dioptric compensation on one eyepiece
Eyepieces	10x/20mm wide-field
Objectives	2x and 4x on turret changer
Focusing device	Fixed on vertical column
	Rack and pinion system with safety stop
	Working distance 115 mm (Max)
	Range 40mm
Stage	Frosted and black / white contrast plates
	2 Stage clips
Illumination	Variable light intensity.
	Converter built-in low voltage (12V electric)
	Episcopic 12V / 3W LED Variable under the optical head
	Diascopic 12V / 3W LED Variable
	Independent light control intensity for each lighting option
Main Power	220-240V / 50-60Hz. (Euro connector)
Packing	Styrofoam in cardboard box
	Packing dimensions 34x18x35 cm (WxDxH)
	Gross weight 4kg.
	Supplied with 2 rubber eyecups, dust cover and instruction manual.

CODE	DESCRIPTION
1800.1000	Star LED Stereo Microscope with 2x, 4x turret
	Accessories
1800.0015	Eyepiece pair 15x/15mm wide-field
1800.0020	20x eyepieces

Research stereo microscope range

The Steddy stereoscopic zoom microscope features dual LED illumination, a single, sturdy column focusing unit and a choice of base shapes. The diamond shaped base allows the hands to be rested on the base of the unit providing the necessary support for delicate operation or manipulation of the sample during examination. The alternative, broad based unit offers a greater surface area for examination of larger samples.



Steddy trinocular stereo microscope

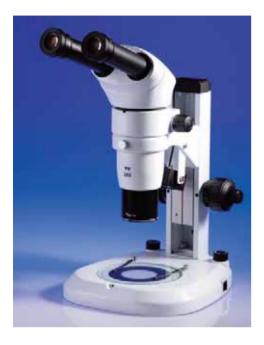
Product ref. 7500.0000

FEATURES	
Optical head	Trinocular, inclined at 45° with photo port
•	Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm
	Dioptric compensation on both eyepiece tubes
Eyepieces	10x/20mm wide-field
Magnification	Zoom system – bilateral knobs click stop feature
	Zoom range 0.65 - 4.5x
	Standard Magnification from 1.5 to 195x
Working distance	165mm (max)
_	Range 115mm
	Focusing mount rack and pinion system
Stage	Frosted and black/white contrast plate
	2 stage clamps
Illumination	LED Variable
	Episcopic fixed under the optical head and directional
	condensing lens with blue filter for daylight 2W
	Diascopic built into the base 5W
	2 Individual switches (variable illumination)
	Supplied with 2 rubber eyecups, dust cover and instruction manual
	and one blue filter
Main Power	220-240V/50-60 Hz (Euro connector) and on/off switch
	Converter built-in low voltage (12V- electronic) with light
	intensity control
Packing	2 Styrofoam shelves in a cardboard box
	Packing dimensions 35x31x46cm (WxDxH)
	Gross weight 7kg

CODE	DESCRIPTION	CODE	DESCRIPTION
	Models	7502.0830	LED 8 W ring illuminator. Plugs directly into Steddy base
7500.0000	Steddy Stereo Microscope with double LED illumination and diamond	7243.5507	Polarising set
	shaped base	7243.1101	Jewellery clamp
7600.0000	Steddy Stereo Microscope with double LED illumination and broad	7357.1111	Microscope adapter for a digital camera, including C-mount
	base design	2480.2075	Cleaning set lens cleaning tissues (20 pcs) + solution (75ml) + brush
	Accessories	2468.9905	Cable with UK plug and Euro connector, black 2m
7500.0005	Eyepiece pair 5x/22mm wide-field	2468.0699	Cable with US plug and Euro connector, black 2m
7500.0015	Eyepiece pair 15x/13mm wide-field		Spares
7500.0020	Eyepiece pair 20x/10mm wide-field	7500.3444	3w LED episcopic light module
7500.0110	Eyepiece micrometer single 10x/20mm with cross line	7500.5444	5w LED diascopic light cluster
	scale 0-14mm 0,1mm	7585.3003	Eyecup pair, rubber
7500.0055	Additional lens 0,5x increases working distance and increases	7587.3456	Stage plate, frosted ø 80mm
	field of view	7587.4565	Stage plate, black/white ø 80mm
7500.0075	Additional lens 0,75x increases working distance and increases	7288.0592	Stage clamp, pair
	field of view	2299.1524	Fuse 5 x 20/500 MA (10 pcs)
7500.0155	Additional lens 1,5x decreases working distance and decreases field of view	7244.0612	Filter blue Ø 35mm

Professional stereo microscope range

The Varizoom is a stereoscopic zoom microscope with parallel infinity optics and an optical zoom system. Three zoom ranges are available with a binocular configuration as standard and an optional trinocular beam splitter module to allow for camera attachments.





Varizoom LED binocular zoom stereo microscope Product ref. 7700.0000

FEATURES	
Optical head	Infinity optics
	Binocular, inclined at 20°
	Interpupillary distance adjustment (Siedentopf type) 45 to 75 mm
	Dioptric compensation on both eyepiece tubes
Eyepieces	10x/22mm wide-field (pointer in one eyepiece)
Magnification	Zoom system Bilateral knobs three different zoom ranges
	1:6 zoom ratio standard magnification 8x to 48x
	1:8 zoom ratio standard magnification 8x to 64x
	1:10 zoom ratio standard magnification 8x to 80x
Stage	Frosted glass / Black and white contrast plate
	2 Stage clips
Illumination	Episcopic fixed under the optical head and directional condensing lens LED 5W
	Diascopic built into the base LED 5W
Objectives	Planachromatic 1x supplied as standard
Main Power	220-240V / 50-60Hz. (Euro connector)
Packing	Supplied with 2 rubber eyecups, one blue filter, dust cover and instruction
	manual
	Packing 2 styrofoam shelves in cardboard box
	Dimensions 40x57x55cm (WxDxH)
	Gross weight 10 Kg
Optional	Optional Trinocular head available

Digital Varizoom 8 LED stereo illumination Product ref. 7700.1008

This innovative LCD digital microscope is a new system which features an embedded 8.4" TFT screen, a user-friendly interface and a powerful processing function for real-time preview, dynamic calibrating and measuring and multiple peripheral

FEATURES as for Varizoom 8		
Eyepieces	ces 10x/22mm wide-field (pointer in one eyepiece)	
Camera	Integral 2 Mpx Camera with CMOS chip	
	8.4 Inch TFT touch screen with mouse option	
	Outputs USB2.0, AV, VGA Output,100M Ethernet interface	
	Operating system Windows CE 5.0	
	Functions, real-time preview, dynamic calibration and measurement	
	SD card slot expandable to max 2GB Kinston SD Card	
	Mouse included	
Packing	Packing dimensions 40x57x55cm (WxDxH)	
	Gross weight 4kg	

CODE	DESCRIPTION	CODE	DESCRIPTION
	Model	7700.3030	Double Iris Diaphragm
7700.0006	Varizoom 6 Stereo Microscope with LED illumination	7700.4040	Ring Illuminator with transformer
7700.0008	Varizoom 8 Stereo Microscope with LED illumination	7700.6000	Tilting Binocular Ergonomic head 5 to 45 degree
7700.0000	Varizoom 10 Stereo Microscope with LED illumination	7700.5207	Darkfield Attachment
7700.1008	Varizoom 8 Stereo Microscope with LED touch screen	7700.4000	Simple Polarisation set
	Accessories	2480.2075	Cleaning set lens cleaning tissues (20 pcs) + solution (75ml) + brush
7700.2343	LED screen module including image capture & measurement software		Spares
7700.1111	Trinocular port beam splitter	7700.6100	LED Incident light 5W
7062.5001	LED 240v 9 W Ring Illuminator for Varizoom with variable light intensity	7700.6200	LED Transmitted 5W
7700.7475	Focusing device Varizoom to adapt binocular head to universal stand	7700.0106	Eyepiece pair 10x/22mm super wide-field
7700.0506	Eyepiece pair 16x/20mm wide-field	7700.2222	Eyecup pair, rubber
7700.2004	Eyepiece pair 20x/13mm wide-field	7487.2198	Stage plate, black/white ø 100mm
7700.0005	Plan Objective 0,5x increases working distance and increases field of view	7488.5921	Stage clamp, pair
7700.0020	Plan Objective 2.0 x Magnification	2299.1524	Fuse 5 x 20/500 MA (10 pcs)

interfaces.

Stereo microscope accessories

Support Arms these allow for the optical head of the microscope to be mounted remotely so that the system can be used to view large samples that do not fit onto the regular stages of the stereo microscopes. The viewing head section only from the microscope is connected to the arm and an additional external light source is required for illumination. This can be comprised of either an LED ring light or a separate cold light source with swan neck arms for direction of the light, where needed.

There are two models available

STEREO Universal stand + round base / universal swivel stand + table clamp
Product ref. 7289.2019 / 7289.5846

CODE	DESCRIPTION
	Model
7289.5846	Universal swivel stand + table clamp
7289.2019	Universal stand + round base
	For Steddy
7503.0000	Optical head only stereoscopic Trino Steddy, with eyepieces 10x
7240.7071	Focusing device to adapt binocular/trinocular head to universal stand
	For Varizoom
7700.0666	Varizoom 6 head only to adapt to focusing device
7700.0888	Varizoom 8 head only to adapt to focusing device
7700.0111	Varizoom 10 head only to adapt to focusing device
7700.7475	Focusing device Varizoom to adapt binocular head to universal stand



RING LIGHT Cold light source

These are used to provide flat uniform lighting of a subject during stereo microscopy.

Two models available For Steddy series For Varizoom series



CODE	DESCRIPTION
	Accessories
	Ring light for Steddy series
7502.0830	LED 8 W ring illuminator. Plugs directly into Steddy base
7700.4040	LED Ring Illuminator with transformer
7062.5001	LED 240v 9 W Ring Illuminator for Varizoom with variable light intensity



Stereo microscope

For photomicrography, we recommend the use of an external light source. A cold light source or an LED ring illuminator will provide high intensity illumination which is ideal for lighting the sample without heating it.



ILLUMINATION Cold Light Source 150W

Product ref. 7063.1502

FEATURES	
Main power	220V AC 50 Hz (Euro connector)
Light intensity	Regulation with electric control 0-100%
Colour temperature	3200°K
Heat filter Bulb	21V 150W halogen reflector bulb (500 burning hours)
Cooling system	Axial ventilator
Packing	Packing dimensions 38x26x21 cm (WxDxH)

ILLUMINATION Cold Light Source 150W

Product ref. 7063.1555

FEATURES	
Main power	220V AC 50 Hz (Euro connector)
Light intensity	Regulation with electric control 0-100%
Colour temperature	3200°K.
Heat filter bulb	21V 150W halogen reflector bulb (500 burning hours)
Cooling system	Axial ventilator
Stackable	
Built in carrying handle	
Filters	Blue filter included, additional colour filters available on request
Packing	Packing dimensions 38x26x21 cm (WxDxH) Gross weight 3.6 Kg

CODE	DESCRIPTION
	Model
7063.1502	Cold light source 150W including double swan neck arm, metal housing
7063.1555	Cold light source 150W including double swan neck arm, plastic housing
	Accessories
7060.2101	Spare bulb halogen reflector 21V 150W
	Specific filter accessories for 7063.1555 available (Green, Red, Violet)



The educational range of Ceti microscopes covers the needs of school and college students with a range of monocular and binocular optical heads depending on the usage and requirements desired. These units are robust and well-designed taking in many of the desirable aspects found on more advanced microscopes to ensure that, as students progress, they are familiar with microscopes and will have no issues in using more advanced systems.



APOLLO E/P educational microscopes

Product ref. 1111.0100 / 1111.0200

FEATURES	
Optical head	360° Degree rotatable
	Monocular, inclined at 45°
Eyepieces	High eye point 10x/18mm wide-field
Nosepiece	Triple, revolving with click stop
Objectives	Achromatic
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17 (spring loaded)
Condenser	Brightfield Abbe – NA 0.65
Stage	Size 110 x 120mm
	Two stage clamps
Focusing	Coaxial coarse and fine
Illumination	Variable light intensity
	Halogen 6V/20W/G4
Main Power	220-240V / 50-60Hz. (Euro connector)
	On/off switch
Converter	Built-in low voltage (6V- electric) with light intensity control
Packing	Packing dimensions 45x29.5x18 cm (WxDxH)
	Gross weight 3.5kg.(E)
	Gross weight 3.8kg.(P)
	Supplied with dust cover

CODE	DESCRIPTION
1111.0100	Apollo E Monocular Microscope
1111.0200	Apollo P Monocular Microscope with photo tube



FOCUS I monocular biological microscope Product ref. 1111.0000

FEATURES	
Optical head	Monocular, inclined at 45° and 360° rotatable
Eyepieces	10x/15mm wide-field with pointer, mounted student proof
Nosepiece	Quadruple, revolving with click stop
Objectives	Achromatic
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17 (spring loaded)
	Precondenser with blue lens
Stage	Size 110 x 110mm with built-in condenser (N.A. 0.65)
	Iris diaphragm and filter holder
	2 Stage clips
	Stage predrilled to accept an attachable mechanical stage
Focusing	Coaxial coarse and fine
Illumination	Variable light intensity
	Halogen 6V/20W/G4
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter built-in low voltage (12V electronic) with light intensity control
Converter	Built-in low voltage (6V- electric) with light intensity control
Packing	Two Styrofoam shelves in a cardboard box
	Packing dimensions 28x19x37 cm (WxDxH)
	Gross weight 4kg
	Supplied with 1 spare bulb, 2 spare fuses, dust cover and instruction manual

CODE	DESCRIPTION
1111.0000	Focus 1 Microscope
	Accessories
1140.9311	Mechanical stage with nonius, attachable on standard stage
1182.1413	Mirror, plan concave with holder
1190.1000	Simple polarising set



FOCUS II monocular microscope

Product ref. 1111.4000

A modern school and college student microscope with a built-in carrying handle and the option of an LED light source.

FEATURES	
Integral handle	Allows for one handed transportation of the microscope
Optical head	Monocular, inclined at 45° and 360° rotatable
Eyepiece	10x/18mm wide-field with pointer, mounted student proof
Nosepiece	Triple, revolving with click stop
Objectives	Achromatic
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17 spring loaded
Condenser	Brightfield abbe – Na 1.25, (Precentred focusable)
Stage	Size 120 x 120mm with built-in condenser (N.A. 0.65)
	Iris diaphragm and filter holder
	Slide clamp
Focusing	Coaxial coarse and fine
Illumination	Variable light intensity
	Halogen 12V/20W/G4
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter built-in low voltage (12V electronic) with light intensity
Packing	Two Styrofoam shelves in a cardboard box
	Packing dimensions 28x19x37 cm (WxDxH)
	Gross weight 4kg
	Supplied with 1 spare bulb, 2 spare fuses, dust cover and instruction manual
LED version	High intensity 5 Watt LED illumination 110v/220v

CODE	DESCRIPTION	CODE	DESCRIPTION
1100.4000	Focus II Microscope with halogen illumination	2480.2075	Cleaning set lens cleaning tissues (20 pcs) + solution (75ml) + brush
1100.4400	Focus II Microscope with LED illumination	9554.1019	Globecam D (digital) eyepiece camera
1100.4440	Focus II Microscope with halogen illumination (quadruple nosepiece)	9855.1019	Globecam V (video) eyepiece camera
	Accessories		Spare Parts
1100.4500	Eyepiece single 10x/18mm with pointer	2260.4124	Bulb halogen 12V/20W/G4 (Each)
1100.4550	Eyepiece single 16x/11mm wide-field	2260.4400	5 Watt LED
1112.1601	Eyepiece single 16x/11mm wide-field with pointer	1120.0004	Objective achromatic 4x / 0.10 / 160 / 0,17
1100.4560	Objective achromatic 60x / 0.85 / 160 / 0,17 (dry)spring loaded	1120.0010	Objective achromatic 10x / 0.25 / 160 / 0,17
1100.4570	Objective achromatic 100x / 1,25 / 160 / 0,17 ((oil)) spring loaded	1120.0040	Objective achromatic 40x / 0.65 / 160 / 0,17 spring loaded
1100.4588	Set of filters blue, green, yellow	1188.4000	Stage clamp, pair
2280.0101	Immersion oil 5 ml	2299.1524	Fuse 5 x 20/500 MA (10 pcs)

These models are available in monocular, binocular or trinocular configuration with a quadruple nose piece. This is an excellent and robust microscope, ideal for teaching purposes, and also extensively used in remote, field-based laboratories.







Colt microscope series (4x 10x 40x 60x/100x objectives) Product ref. 1100.5101

FEATURES	
Optical head	Binocular, inclined at 30° and 360° rotatable
Eyepieces	10x/18mm wide-field
Nosepiece	Quadruple, revolving with click stop
Objectives	Achromatic
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17
	100x / 0.65 / 160 / 0.17 (S 0il)
Stage	Size 110 x 120mm with built-in mechanical stage
	60mm transversal movement
	30mm longitudinal movement
Condenser	Abbe condenser with iris diaphragm
Focusing	Coaxial coarse and fine
Illumination	Variable light intensity
	Halogen 6V/15W/G4
Main Power	220-240V / 50-60Hz, (Euro connector)
	Converter built-in low voltage
Packing	Two Styrofoam shelves in a cardboard box
	Packing dimensions 23x32x43 cm (WxDxH)
	Gross weight 6kg
	Supplied with 1 spare bulb, 2 spare fuses, dust cover and instruction manual

CODE	DESCRIPTION	CODE	DESCRIPTION
1100.5160	Colt Monocular Microscope with 4x, 10x, 40x and 60x objectives		Spare Parts
1100.5162	Colt Binocular Microscope with 4x, 10x, 40x and 60x objectives	2260.4000	Bulb halogen 6V/20W/G4 Each
1100.5101	Colt Binocular Microscope with 4x, 10x, 40x and 100x objectives	2260.5000	LED 5W replacement.
1100.5103	Colt Trinocular Microscope with 4x, 10x, 40x and 100x objectives	1202.4004	Objective achromatic 4x / 0.10 / 160 / 0.17
	Accessories	1202.4010	Objective achromatic
1100.5506	Simple polarisation set including stage	1202.4040	Objective achromatic 40x / 0.65 / 160 / 0.17 spring loaded
1100.5505	Simple polarisation set without stage	1202.4100	Objective achromatic 100x /1.25 / 160 / 0.17 (oil) spring loaded
1100.0402	40x Phase contrast attachment	1202.4601	Condenser Abbe (NA 1.25) with iris diaphragm + filter holder
1100.0404	10x/40x/100x Phase contrast kit (inc centring telescope)	1202.9212	Filter blue Ø 32mm
1100.0638	Darkfield condenser dry NA 0.9	2299.1524	Fuse 5x 20/500 MA (10 pcs)
1100.0639	Darkfield condenser oil		

The Akropol is designed to introduce polarisation techniques, whilst allowing for the measurement of the degree of rotation that the sample induces. The unit is available with a number of objective configurations in a choice of monocular, binocular or trinocular optical heads.



Akropol polarisation binocular microscope Product ref. 1111.2443

Optical head Binocular, inclined at 30° Interpupillary distance 53 to 75 mm Dioptric adjustment on one eyepiece tube Eyepieces High eye point 10x/16mm wide-field Nosepiece Quadruple reversed and revolving with click stop Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	FEATURES	
Interpupillary distance 53 to 75 mm Dioptric adjustment on one eyepiece tube Eyepieces High eye point 10x/16mm wide-field Nosepiece Quadruple reversed and revolving with click stop Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 10x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Optical head	360° Degree rotatable
Dioptric adjustment on one eyepiece tube Eyepieces High eye point 10x/16mm wide-field Nosepiece Quadruple reversed and revolving with click stop Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Binocular, inclined at 30°
Eyepieces High eye point 10x/16mm wide-field Nosepiece Quadruple reversed and revolving with click stop Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Interpupillary distance 53 to 75 mm
Nosepiece Quadruple reversed and revolving with click stop Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Dioptric adjustment on one eyepiece tube
Objectives Achromatic SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Eyepieces	High eye point 10x/16mm wide-field
SP 4x / 0.10 / 160 / 0.17 SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Polariser and analyser Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Nosepiece	Quadruple reversed and revolving with click stop
SP 10x / 0.25 / 160 / 0.17 SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Objectives	Achromatic
SP 40x / 0.65 / 160 / 0.17 spring loaded SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		SP 4x / 0.10 / 160 / 0.17
SP 100x / 1.25 / 160 / 0.17 spring loaded Polarising set Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 60/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		SP 10x / 0.25 / 160 / 0.17
Polarising set Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		SP 40x / 0.65 / 160 / 0.17 spring loaded
Precondenser With field diaphragm Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		SP 100x / 1.25 / 160 / 0.17 spring loaded
Condenser Brightfield Abbe – NA 1.25 Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Polarising set	Polariser and analyser
Stage Round centrable and rotating stage 360° Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Precondenser	With field diaphragm
Graduated Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Condenser	Brightfield Abbe – NA 1.25
Diameter 120mm Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Stage	Round centrable and rotating stage 360°
Two stage clamps Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Graduated
Focusing Coaxial coarse and fine Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Diameter 120mm
Tension adjustment ring (on left knob) Illumination Variable light intensity Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Two stage clamps
Illumination Variable light intensity Halogen 6V/20W/G4	Focusing	Coaxial coarse and fine
Halogen 6V/20W/G4 Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		Tension adjustment ring (on left knob)
Main Power 220-240V / 50-60Hz. (Euro connector) On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Illumination	Variable light intensity
On/off switch Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		
Converter built-in low voltage (6V- electric) with light intensity control Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)	Main Power	,
Packing Two Styrofoam shelves in cardboard box Packing dimensions 48x38x24 cm (WxDxH)		On/off switch
Packing dimensions 48x38x24 cm (WxDxH)		
	Packing	
Gross weight 7kg		Packing dimensions 48x38x24 cm (WxDxH)
		Gross weight 7kg
Supplied with 1 spare bulb, spare fuse, immersion oil 10 ml, dust cover, and		
instruction manual.		
2 Styrofoam shelves in cardboard box		- 7
Packing dimensions 45x29.5x18 cm (WxDxH)		
Gross weight 3.8kg		Gross weight 3.8kg





CODE	DESCRIPTION
1111.2441	Akropol Monocular Polarising Microscope 4x 10x 40x 60x objectives
1111.2442	Akropol Monocular Polarising Microscope 4x 10x 40x 100x objectives
1111.2443	Akropol Binocular Polarising Microscope 4x 10x 40x 100x objectives
1111.2444	Akropol Binocular Polarising Microscope 4x 10x 40x 60x objectives
1111.2445	Akropol Trinocular Polarising Microscope 4x 10x 40x 100x objectives

Max II microscopes are a cost-effective option and are perfect for under and post-graduate teaching laboratories. Ideally suited to routine, bench-top microscopy work for general purpose slide examinations where prolonged usage is not the norm. They are designed and manufactured to the latest demanding specifications and provide a thoughtfully-designed ergonomic solution, whilst being compact enough to allow for storage and handling between different locations within a teaching environment.

Max II microscopes are available in either monocular, binocular or trinocular configurations and have the following features as standard:



INTEGRAL CARRYING HANDLE

Allows for one handed transportation of the microscope.



OBJECTIVES

A wide variety of high clarity objectives are available with Achromatic and supplied as standard and options on Planachromatic.

All objectives are colour coded to ease identification when in use.



PRECONDENSER

Removable to accept a mirror and also access the light source. To access the light bulb, the precondenser housing is removed by gently pulling as it is held in position by magnets. This ensures quick interchangeability of the light bulb and the easy placement of the mirror attachment for field use in locations without power.



REVERSED NOSEPIECE FULL MECHANICAL STAGE

Quadruple reversed, so providing easy uninterrupted access to the stage when changing over slides. Has full X-Y movement and spring loaded slide clip.



CODE	DESCRIPTION
1201.4000	Max II Monocular 4x,10x, 40x,100x achromatic objectives
1201.4060	Max II Monocular 4x, 10x, 40x, 60x achromatic objectives

MAX II monocular biological microscope Product ref.1201.4000

FEATURES	
Optical head	Monocular, inclined at 45° and 360° rotatable
	Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm
	Dioptric adjustment on one eyepiece
Eyepieces	10x/18mm wide-field
Objectives	Achromatic as standard colour coded
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17 spring loaded
	100x / 1.25 / 160 / 0.17 (Oil) spring loaded
Nosepiece	Quadruple reversed, revolving with click stop
Stage	Size 140 x 140mm with built-in mechanical stage and removable slice clip
	75mm transversal movement
	50mm longitudinal movement
	Nonius reading up to 0.1 mm
Condenser	Brightfield Abbe – NA 1.25 - precentred
	Iris diaphragm and filter holder
Focusing	Coaxial course and fine
	Focusable with rack and pinion height adjustment system
Precondenser	Removable to accept mirror and access to light source
Illumination	Variable light intensity
	Halogen 6V/20W/G4 as standard
Main Power	220-240V / 50-60Hz. (Euro connector)
	On/off switch
Converter	Built-in low voltage (6V- electric) with light intensity control
Packing	Two Styrofoam shelves in cardboard box
	Packing dimensions 38x28x51 cm (WxDxH)
	Gross weight 8kg
	Supplied with immersion oil, blue filter, dust cover and instruction manual



MAX BINO II biological compound microscope Product ref. 1202.4000

The binocular version of the Max series with a choice of objectives types and LED illumination if preferred.

FEATURES as for Max Mono II except for

Optical head Binocular, inclined at 45° and 360° rotatable

CODE	DESCRIPTION
	Accessories
1202.4000	Max II Binocular 4x,10x,40x,100x achromatic objectives
1202.3000	Max II Binocular 4x,10x,40x,100x achromatic objectives & LED illumination
1202.3500	Max II Binocular 4x,10x,40x,100x planachromatic objectives
1202.3700	Max II Binocular 4x,10x,40x,100x planachromatic infinity corrected objectives



MAX TRINO II biological compound microscope Product ref.1202.5000

The trinocular variant of the Max II microscope that allows for the attachment of a digital camera for recording and capturing images, connected via a C mount fitting.

FEATURES as for Max Mono II except for

Optical head Trinocular, inclined at 30° and 360° rotatable

CODE	DESCRIPTION
	Accessories
1202.5000	Max II Trinocular 30 deg head 4x,10x,40x,100x achromatic objectives
1202.5500	Max II Trinocular 30 deg head 4x,10x,40x,100x planachromatic objectives



DIGI-MAX II compound binocular microscope with integral 1.3Mpx digital camera

Product ref. 1202.7000

The entry level in dedicated binocular microscopes with an integrated 1.3Mpx digital camera for image capture and analysis.

Camera	Integral 1.3 Mpx Camera
	Valid pixel 1280x1024 (1.3 M Pixel)
	USB 2.0 Suitable for Windows 2000/XP/Vista/Win7
	Range of field of view 90deg.
	CD driver / software, calibration slides and manual

CODE	DESCRIPTION
1202.7000	Max II Binocular 30 deg head 4x,10x,40x,100x achromatic objectives with
	1.3Mpx camera and software



DIGI-MAX II trinocular microscope with 3Mpx digital camera and analysis software Product ref. 1202.8000

A dedicated digital-camera microscope using a 3Mpx digital USB camera and advanced software to allow for image capture and analysis.

The camera system is the SI 3000; more details on the specification of this can be found on page 37.

FEATURE	FEATURES as for 1202.5000 with 30° inclined head	
Camera	Integral 3 Mpx Camera	
	Sl3000 Ceti camera and software	
	High performance 3 Mpx camera developed for microscopy	
	1/2" 2048 x 1536 (QXGA) image array and on-chip converter Up to 17 frames	
	per second (fps)	
	Full resolution and 40fpsat XGA (1024 x 768) resolution	
	Sensitivity 1.0V/Lux-sec	
	Complete with USB cable and image analysis software	

CODE	DESCRIPTION
1202.8000	Max II Trinocular 30 deg head 4x,10x,40x,100x achromatic objectives II with
	integral SI3000 camera and software



MAX II with 3Mpx CMOS camera + LCD flip up screen

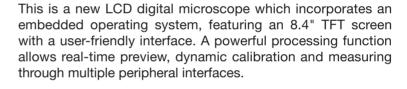
Product ref. 1202.9000

The camera system allows for either an analogue or digital output so that an AV or digital signal can be selected.

FEATURE	FEATURES as for 1202.5000 with 30° inclined head	
Camera	3Mpx CMOS chip	
	2.5" Colour TFT LCD display, 100° maximum elevation angle, pivoting LCD	
	screen	
	LCD screen with 4×digital zooming, rotatable at maximum 100°elevation	
	angle and 180° pivoting	
	Support USB, AV, S-Video and Audio output	
	Simultaneous ocular viewing and LCD	
	Resolution: Static Image 2048×1536; Video 320×240	
	Simultaneous display of real-time image on TV and PC	
	Outputs USB, AV, S-Video and Audio are available	
	Memory 32MB Expandable to 1GB SD Card slot for external storage	

CODE	DESCRIPTION
1202.9000	Max II Binocular 30 deg head 4x,10x,40x,100x achromatic objectives with
	integral camera and flip up screen







FEATURE	FEATURES as for 1202.5000 with 30° inclined head	
Camera	Integral 2 Mpx Camera with CMOS chip	
	8.4 Inch TFT touch screen with mouse option	
	Outputs USB2.0, AV, VGA Output, 100M Ethernet interface	
	Operating system Windows CE 5.0	
	SD card slot expandable to max 2GB Kinston SD Card	
	Mouse connection available	

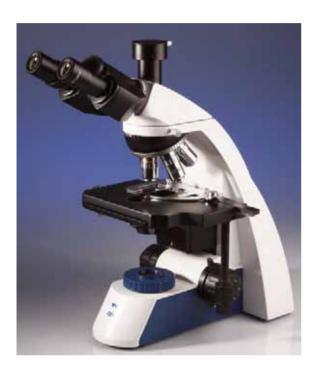
ſ	CODE	DESCRIPTION
ı	1202.6000	Max II Binocular 30 deg head 4x,10x,40x,100x achromatic objectives with
L		integral camera and 8.4"TFT touch screen

CODE	DESCRIPTION	CODE	DESCRIPTION
	Accessories	1202.1401	Aluminium case
1202.4016	Eyepiece single, 16x / 18mm wide-field	1202.2202	Mirror, plan concave, with holder
1202.4017	Eyepiece pair, 16x / 18mm wide-field	1202.4888	C mount adapter
1202.1005	Eyepiece pair 10x/18mm wide-field	2280.0101	Immersion oil 5 ml
2249.1001	Object micrometer with scale 1mm 0.01mm used with micrometer eyepiece	2480.2075	Cleaning set lens cleaning tissues (20 pcs) + solution (75ml) + brush
1202.4007	Eye piece micrometer 10x/18mm with cross line scale 0-18mm 0.1mm (single)		Spare Parts
1202.4020	Objective achromatic 20x / 0.40 / 160 / 0.17	2260.4000	Bulb halogen 6V/20W/G4 Each
1202.4066	Objective achromatic 60x / 0.85 / 160 / 0.17 (dry) spring loaded	2260.5000	LED 5W replacement.
1202.5507	Polarising set, analyser + polariser	1202.4004	Objective achromatic 4x / 0.10 / 160 / 0.17
1202.4603	Darkfield condenser NA 0.9	1202.4010	Objective achromatic
1202.4703	Darkfield condenser oil NA1.25-1.36	1202.4040	Objective achromatic 40x / 0.65 / 160 / 0.17 spring loaded
1202.4999	Turret phase contrast kit with Ach 10x, 40x 100x phase objectives	1202.4100	Objective achromatic 100x /1.25 / 160 / 0.17 (oil) spring loaded
1202.4777	Simple phase contrast kit with Ach 10x 40x phase objectives and	1202.4601	Condenser Abbe (NA 1.25) with iris diaphragm + filter holder
	separate condenser	1202.9212	Filter blue Ø 32mm
2460.2002	Heating stage 150x130cm Amb to 50° C including controller	2299.1524	Fuse 5x 20/500 MA (10 pcs)

The Magnum series has a robust T-shaped base, designed for maximum stability, with modern ergonomic features to ensure a comfortable, prolonged viewing position.

Magnum offers greater flexibility and has a broader appeal for a wider range of uses as a result of the different types of illumination methods available. These include brightfield, darkfield, polarisation, phase contrast and fluorescence.

The units are binocular as standard with a trinocular port option also available for the attachment of a digital camera system. Details on our extensive camera range can be found in the digital imaging section on pages 36 - 39.



MAGNUM-B/T compound biological microscope with semi-planachromatic objectives Product ref. 2621.0000/2721.0000

The entry level Magnum using semi planachromatic objectives is ideal for routine use in general QC conditions and for routine examinations of slide mounted samples.

FEATURES	
Optical head	Inclined at 30°
	Option on Binocular or Trinocular including vertical photo/video port (Ø30mm)
	Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm Dioptric
	compensation on one eyepiece tube
Eyepieces	10x / 20mm wide field
Nosepiece	Quintuple, reversed and revolving with click stop
Objectives	Model dependent on type but as standard (CCS Optics)
	4x / 0.10 / 160 / 0.17
	10x / 0.25 / 160 / 0.17
	40x / 0.65 / 160 / 0.17 spring loaded
	100x / 1.25 / 160 / 0.17 (oil) spring loaded
	For objective type see individual models below
Precondenser	With field diaphragm mounted in base plate
Condenser	Brightfield Abbe – NA 0.90 – NA1.25 oil
	Full Koehler illumination control
	Iris diaphragm and filter holder
	Focusable with rack and pinion height adjustment system
Stage	Size 210 x 140mm with built-in mechanical stage and slide clip
	Transversal and longitudinal adjustment by fingertip control
	90mm transversal movement
	60mm longitudinal movement
	Nonius reading up to 0.1 mm
Focusing	Coaxial coarse and fine
	Pre-focusing mechanism (on left knob)
	Tension adjustment ring (on right knob)
Illumination	Halogen 6V/30W/G4
Main Power	220-240V / 50-60Hz. (Euro connector)
	On/off switch
	Converter built-in low voltage (6V- electric) with light intensity control
Packing	Two Styrofoam shelves in a cardboard box
	Packing dimensions 68x50x50cm (WxDxH)
	Gross weight 10 kg.
Supplied with	1 spare bulb, 2 spare fuses, immersion oil 10ml, blue and green filter,
	soft rubber eyecups, dust cover and instruction manual



MAGNUM-B compound biological microscope with LED illumination

Product ref. 2621.7000

The Magnum LED is a rechargeable microscope that utilises an LED light source equivalent to a 20W halogen bulb. The unit is only available in binocular configuration and comes with semi planachromatic objectives having the same configuration as the Magnum (2621.0000). The unit is ideal where power supplies are intermittent or where a portable field microscope.

The battery life is approximately 6 hours between charges dependent on the intensity of the light during usage.

CODE	DESCRIPTION
2621.0000	Magnum B with 4x,10x,40x,100x oil semi planachromatic objectives
2721.0000	Magnum T with 4x,10x,40x,100x oil semi planachromatic objectives
2621.7000	Magnum B with s 4x,10x,40x,100x oil with LED light source semi plan
	achromatic objective
	Accessories
2621.0203	Objective S-planachromatic 20x / 0.40 / 160 / 0.17
2621.0605	Objective S-planachromatic 60x / 0.85 / 160 / 0.17 spring loaded
	Spares
2621.0041	Objective S-planachromatic 4x / 0.10 / 160 / 0,17
2621.0102	Objective S-planachromatic 10x / 0.25 / 160 / 0.17
2621.0404	Objective S-planachromatic 40x / 0.65 / 160 / 0.17 spring loaded
2621.1006	Objective S-planachromatic 100x / 1.25 / 160/ 0.17 (oil) spring loaded



MAGNUM-B/T compound biological microscope with planachromatic objectives Product ref. 2622.0000 / 2722.0000

The Magnum series uses planachromatic objectives which are ideal for enhanced viewing. A full flat field image is created, which is ideal for imaging purposes, for routine use in general QC conditions or for routine examinations of slide mounted samples.

FEATURES	FEATURES as standard Magnum except for	
Objectives	4x / 0.10 / 160 / 0.17 planachromatic	
	10x / 0.25 / 160 / 0.17 planachromatic	
	40x / 0.65 / 160 / 0.17 planachromatic spring loaded	_
	100x / 1.25 / 160 / 0.17 planachromatic (oil) spring loaded	

Dedicated Accessories and Spares for Magnum series

CODE	DESCRIPTION
2622.0000	Magnum B with 4x,10x,40x,100x oil planachromatic objectives
2722.0000	Magnum T with 4x,10x,40x,100x oil planachromatic objectives
	Accessories
2622.0055	Objective planachromatic 5x / 0.12 / 160 / 0.17
2622.0206	Objective planachromatic 20x / 0.40 / 160 / 0.17
2622.0608	Objective planachromatic 60x / 0.85 / 160 / 0.17 spring loaded
	Spares
2622.0044	Objective planachromatic 4x / 0.10 / 160 / 0.17
2622.0105	Objective planachromatic 10x / 0.25 / 160 / 0.17
2622.0407	Objective planachromatic 40x / 0.65 / 160 / 0.17 spring loaded
2622.1009	Objective planachromatic 100x / 1.25 / 160 / 0.17 (oil) spring loaded



MAGNUM-B/T compound biological microscope with planachromatic infinity corrected objectives Product ref. 2800.0005 / 2810.0005

The ultimate Magnum series for brightfield viewing with infinity corrected objectives to allow for the switching of objectives without the need to re-focus each time an objective change is made.

FEATURES as standard Magnum except for		
Nosepiece Quintuple, reversed and revolving with click stop.		
Objectives Planachromatic infinity corrected optics and infinity corrected system		
PLi 4x / 0.10 / 0.17		
PLi 10x / 0.25 / 0.17		
PLi 40x / 0.65 / 0.17 spring loaded		
PLi 100x / 1.25 / 0.17 (oil) spring loaded		

CODE	DESCRIPTION		
2800.0005	Magnum B with 4x,10x,40x,100x oil planachromatic infinity corrected objectives		
2810.0005	Magnum T with 4x,10x,40x,100x oil planachromatic infinity corrected objectives		
	Accessories		
2629.0205	Objective planachromatic infinity corrected 20x / 0,40 / ∞ / 0,17		
6329.0605	Objective planachromatic infinity corrected 50x / 0,65 / ∞ / 0,17 spring loaded		
2629.0610	Objective planachromatic infinity corrected $60x / 0.85 / \infty / 0.17$ spring loaded		
	Spares		
2629.0046	Objective planachromatic infinity corrected $4x / 0.25 / \infty / 0.17$		
2629.0107	Objective planachromatic infinity corrected $10x / 0.25 / \infty / 0.17$		
2629.0408	Objective planachromatic infinity corrected $40x / 0.65 / \infty / 0.17$ spring loaded		
2629.1009	Objective planachromatic infinity corrected $100x / 1,25 / \infty / 0,17$ (oil) spring loaded		



MAGNUM-B/T compound biological microscope with phase contrast

Product ref. 2638.0000 / 2738.0000

This model is supplied complete with a dedicated phase contrast turret based system which has 4 phase rings and a brightfield viewing position. The objective turret is a sextuple unit with two free spaces to allow for the inclusion of additional objectives.

FEATURES as standard Magnum except for			
Nosepiece	Sextuple, reversed and revolving with click stop		
	Two positions free for addition of brightfield objectives		
Objectives	Model dependent on type but as standard (CCS Optics)		
	PH 10x / 0.25 / 160 / 0.17 PH+ spring loaded		
	PH 20x / 0.40 / 160 / 0.17 PH+ spring loaded		
	PH 40x / 0.65 / 160 / 0.17 PH+ spring loaded		
	PH 100x / 1.25 / 160 / 0.17 PH+ (oil) spring loaded		
Condenser	As standard but with 5 position turret based rotatable with phase rings and 5th brightfield viewing position		

CODE	DESCRIPTION
2638.0000	Magnum B with 10x, 20x, 40x, 100x oil phase contrast planachromatic objectives
2738.0000	Magnum B with 10x, 20x, 40x, 100x oil phase contrast planachromatic objectives
	Accessories
2629.0205	Objective planachromatic $20x / 0,40 / \infty / 0,17$
6329.0605	Objective planachromatic $50x / 0.65 / \infty / 0.17$ spring loaded
2629.0610	Objective planachromatic $60x / 0.85 / \infty / 0.17$ spring loaded
	Spares
2629.0046	Objective planachromatic $4x / 0.25 / \infty / 0.17$
2629.0107	Objective planachromatic $10x / 0.25 / \infty / 0.17$
2629.0408	Objective planachromatic $40x / 0.65 / \infty / 0.17$ spring loaded
2629.1009	Objective planachromatic $100x / 1,25 / \infty / 0,17$ (oil) spring loaded



MAGNUM-T epi-fluorescence biological compound microscope with HBO 100W light source

Product ref. 2747.2000

Designed for both brightfield viewing and the fluorescent examination of samples. The unit comes with a turret based fluorescence system with four built in filter blocks as standard and a 5th brightfield viewing position. The fluorescent light source is from a 100W Mercury bulb.

FEATURES as for Magnum T except for				
Fluorescence	Fluorescence attachment			
	Sits between objective turret and optical head 100W light source at rear			
	of module with a centrable rear mirror and X-Y movement to optimise			
	illumination module. Developed to provide equivalent performance and			
	capability to standard fluorescence microscopy.			
	Anti fluorescence safety screen to protect user from fluorescence light			
	5 position turret wheel with 4 filter blocks and one brightfield viewing position			
	Filter assemblies included in turret system			
Objectives	PC 40x / 0.65 / 160 / 0.17 FL (Ceti Zi High clarity objective)			
	PC 100x / 1.25 / 160 / 0.17 (oil) FL - spring loaded			

FLUORESCENT FILTER BLOCKS		
Filter colour	Excitation Filter	Barrier filter
B (blue	420-485 nm	520nm
G (green	460-550 nm	580nm
UV (ultraviolet)	330-400 nm	425nm
V (violet)	395-415 nm	455nm



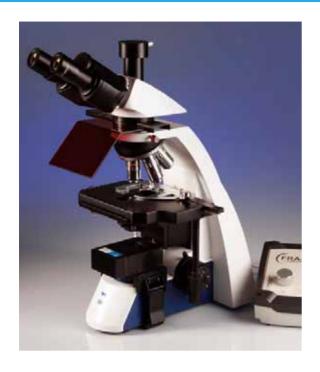
MAGNUM-T epi fluorescence biological compound microscope with LED fluorescent attachment

Product ref. 2777.0000

As above except that the mercury bulb is exchanged for an LED light source. This ensures that the unit is mercury free in operation and greatly extends the lifetime of the light source.

FEATURES as for Magnum Epi fluorescence with HBO light source except for Epi-fluorescence attachment LED light source (as opposed to HBO) Longer light source lifetime typically > 30000hours No warm up / cool down time necessary for the light supply

	DEGODINE
CODE	DESCRIPTION
2747.2000	Microscope Trino Magnum-T for epi-fluorescence with HBO 100W light source
2777.0000	Microscope Trino Magnum-T for epi-fluorescence with LED light source
	Accessories
2726.0046	Objective planachromatic FL 4x / 0,10 / 0,17
2726.0107	Objective planachromatic FL 10x / 0,25 / 0,17
2726.0208	Objective planachromatic FL 25x / 0,40 / 0,17
	Spares
2726.1270	Objective planachromatic FL 100x / 1,25 / 160 / 0,17 fluorescence free (oil) spring
2760.1003	Bulb Hg-vapour high pressure 220V/HBO-100W
2767.1524	Power supply 220-240V/50Hz for 100W HBO epi-fluorescence illumination
2780.0103	Fluorescence free oil 10ml
2799.1005	Fuse 5x20/5A for 100W power supply (10 pcs)



MAGNUM-T biological microscope for fluorescence with LED transmitted light source Product ref. 2766.0000

This microscope uses the Magnum T with infinity corrected objectives (code 2729.0000) to perform transmitted fluorescence. The light source module simply clips onto the base of the microscope with the interchangeable excitation and barrier filter modules underneath the first stage. This versatile microscope can readily switch between brightfield and fluorescence viewing and is easy to upgrade. The fluorescence module is held in position by a quick release clamp mechanism.

FEATURES as for Magnum T

One, two and three colour excitation. With adequate emission filters multicolour 9 observation is achieved

No light source alignment necessary. LED cassettes fit neatly into adapter and are easily interchanged

Longer light source lifetime typically > 30000hours

No warm up /cool down time necessary for the light supply

STANDARD SUPPLIED CASSETTES			
Filter colour	Excitation Filter	Suitable for	
B (blue)	480 nm	FITC, Alexa 488, EGFP	
G (green)	535 nm	TRITC, Cy3, Alexa 532,	

OPTIONAL CASSETTES			
Filter colour	Excitation Filter	Suitable for	
UV (ultraviolet)	365nm	DAPI Auramine 0, Acridine	
RB (royal blue)	450nm	Orange	
C (cyan)	505nm	Note on request	
Y (yellow)	590nm	Texas Red, Alexa 594	
R (red)	630nm	Cy5, Alexa 633, Alexa 647	

CODE	DESCRIPTION
2766.0000	Magnum T with planachromatic infinity corrected objectives 4x, 10x, 40x, 100x
	(oil) and LED fluorescence module.
	Accessories
2766.1020	UV cassette
2766.1030	Cyan cassette
2766.1050	Yellow cassette
2766.1060	Red cassette
2766.1070	Royal blue cassette
2766.1111	Three position filter slider
	Spares
2766.1010	Blue LED cassette
2766.1040	Green cassette



MAGNUM-B/T POL compound biological microscope for polarisation Product ref. 2653.0000 / 2753.0000

A research-grade, dedicated polarisation microscope complete with BERTRAND lens and Lambda compensating plates. The unit uses transmitted light for the examination of translucent samples.

FEATURES	
Optical head	Binocular or Trinocular
	With Bertrand lens (iris diaphragm)
	Analyser
	Slit under the optical head to accept lambda compensating plates
Nosepiece	Quadruple and revolving with click stop
Objectives	Tension free and parcentred (CCS Optics)
	SP 4x / 0.10 / 160 / 0.17
	SP 10x / 0.25 / 160 / 0.17
	SP 40x / 0.65 / 160 / 0.17 spring loaded
	SP 60x / 0.80 / 160 / 0.17 (oil) spring loaded
Stage	Round centrable and rotating stage (360°)
	Graduated
	Diameter 180mm
	Two stage clamps
Illumination	Halogen 6V/20W/G4
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter built-in low voltage (6V- electric) with light intensity control
Supplied with	3 compensating plates (1st order red/Quartz/ ¼ wavelengths)

Accessories for Magnum Series

CODE	DESCRIPTION	CODE	DESCRIPTION
	Accessories	2643.5501	Polarising set, analyser + polariser
2611.0101	Eyepiece pair 10x/20mm wide-field	2643.5209	Condenser darkfield dry (NA 0.83-0.95)
2611.1205	Eyepiece pair 12.5x wide-field	2633.5303	Condenser darkfield Cardioid (oil) (NA 1.36-1.25)
2611.1607	Eyepiece pair 16x/11,5mm wide-field	2757.4500	Trinocular port adapter to eye piece fitting 18mm
2613.1005	Eyepiece single with pointer 10x/20mm	2757.6132	Microscope adapter for 1/3 inch CCD-camera, including C-mount
2613.1003	Eyepiece micrometer single 10x/20mm with cross line scale 0-10mm 0,1mm	2757.2126	Microscope adapter for 1/2 inch CCD-camera, including C-mount
2249.1001	Object micrometer with scale 1mm 0,01mm used with micrometer eyepiece	2647.4804	Aluminium carry case Magnum
2638.5102	Phase contrast, complete, positive turret condenser (4 phase annular	2480.2075	Cleaning set lens cleaning tissues (20 pcs) + solution (75ml) + brush
	stops) with iris diaphragm 4 pos. phase planachromatic objectives	2280.0101	Immersion oil 5 ml
	10x/ - 20x/ - 40x/ - 100x(oil)/, centring telescope, filters (green & yellow)	2699.2250	Fuse 2x250 MA (10 pcs)

Triton II microscopes

The Triton II series represents the pinnacle of compound microscopy in the CETI range and is ideal for clinical applications with its variety of lighting options. These models include as standard a trinocular port for the addition of a camera system whilst the ergonomic head option provides comfortable and adjustable use for multiple viewers. There is also the option to add teaching heads for simultaneous shared viewing by multiple users.

A set of filters is included to optimise contrast and colour correction. This ensures crystal clear definition of ridges, cell walls, pits and particles.

The Triton II has four objectives, which are attached to a revolving and reversed sextuple nosepiece with click-stop. The powerful illumination and condenser ensure optical brightness and total clarity.



TRITON II trinocular microscope Product ref. 3100.5000

	,
FEATURES	
Optical head	Trinocular, inclined at 30°
·	Interpupillary distance adjustment (Siedentopf type): 48 to 75 mm
	Vertical photo/video port with beam-splitting prism on sliding mount
	Vertical height adjustment two positions 20mm
Eyepieces	10x/22mm wide-field (pair)
	Dioptric compensation: on one eyepiece tube
Nosepiece	Sextuple reversed and revolving with click stop
Objectives	E-plan infinity corrected
	E-PL $4x / 0.10 / \infty / 0.17$
	E-PL 10x / 0.25 / ∞ / 0.17
	E-PL 40x / 0.65 / ∞ / 0.17 spring loaded
	E-PL 100x / 1.25 / ∞ / 0.17 (oil) spring loaded
Condenser	Swing-out condensing lens – Brightfield NA 1.25
	Centrable through a centring device
	Focusable with rack and pinion height adjustment system
	Iris diaphragm
	Swing out filter holder
Stage	Size 185 x 142mm with built-in mechanical stage and slide clip
	75mm transversal movement.
	55mm longitudinal movement
	Nonius reading up to 0.1 mm
Focusing	Coaxial coarse and fine
	Pre-focusing mechanic (on left knob)
	Tension adjustment ring (on right knob)
Illumination	Variable
	Koehler illuminator (external housing) with integrated field diaphragm and
	concentrating lens
	Filter: blue (diameter 38mm). Other colours available on application
	Halogen 12V/50W/G6 with integrated field diaphragm and swing – out
	concentrating lens
	Optional 100W illumination available
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter: built-in low voltage (12V- electric) with light intensity control
Packing	Supplied with: 1 spare bulb, blue filter, 2 spare fuses, immersion oil 10ml,
	dust cover and instruction manual

TRITON II 100W trinocular microscope Product ref. 3100.5150

The standard model as described above within the specification table with enhanced lighting

FEATURES	as for Triton II Ergo (3100.5050)
Illumination	100W external light housing

Triton II microscopes



TRITON II 50W/100W trinocular microscope with ergonomic head

Product ref. 3100.5050/3100.5150

Features are as for the standard microscope with the addition of an ergonomic head that can be adjusted from 0° to 45°. The trinocular port is positioned to the rear of the head piece.

The ergonomic head allows for multiple user viewing without the need to change the seating height, simply adjust the eyepiece angle and height to suit the operators.

CODE	DESCRIPTION
3100.5000	Triton II with 4x, 10x, 40x, 100x oil 30° head and planachromatic objectives
3100.5050	Triton II 50W- with 4x,10x,40x,100x oil ergonomic Trinocular head planachromatic
	objectives
3100.5150	Triton II 100W- with ergonomic Trinocular head



TRITON II 100W trinocular microscope with master ergonomic head and teaching head options.

Product ref. 3100.9050

Model dependent, see table below

This model is supplied with 100W illumination as standard to ensure that there is a bright field of view in each viewing head. The master head is ergonomic and includes a laser pointer.

Each teaching head has the same specification as the standard Triton II binocular.

CODE	DESCRIPTION
3100.9050	Triton II with second viewing head right side II with 30° head and 4x,10x, 40x, 100x
	oil planachromatic objectives
3100.9100	Triton II with two teaching heads right hand side
3100.9200	Triton II with three teaching heads (2 right hand side, 1 left hand side)
2621.9500	Triton II with four teaching heads

Triton II microscope series



TRITON II trinocular microscope for fluorescence (HBO 100W)

Product ref. 3100.7000

Specifications as for Triton II with an ergonomic head, bar the following changes. A dedicated fluorescent module has been added. The camera port is now mounted on the left hand side to accommodate the HBO light source.

FEATURES	S as for standard Triton with ergonomic head
High definition	on FL objectives
	Infinity PL 20x / 0.65 / 0.17 FL spring loaded
	Infinity PL 40x / 1.00 / 0.17 FL glycerine spring loaded
	Infinity PL 100x / 1.25 / 0.17 FL glycerine spring loaded
	External lamphouse with centrable and focusable high pressure mercury bulb HBO-100W HBO
	Stable power supply with digital display and usage digital timer
Packing	Supplied with: glycerine (oil) 10ml, 2 spare fuses 3.15A, instruction manual and blocking plate for stage

Position	Excitation filter	Barrier filter
B excitation	400-490nm	520nm with dichroic mirror
G excitation	510-550nm	and barrier filter
		575nm with dichroic mirror
		and barrier filter

OPTIONAL FLUORI	ESCENT FILTER BLOCKS	
Available options	Available options	Available options
Position	Excitation filter	Barrier filter
U excitation	330-400nm	420nm Accessory
V excitation	395-415nm	450nm Accessory

CODE	DESCRIPTION
3100.7000	Triton II for Epi Fluorescence
	Accessories
	UV filter assembly
	V filter assembly

CODE	DESCRIPTION	CODE	DESCRIPTION
	Accessories	3152.0041	Projection lens 4x for photomicrography
3143.5501	Polarising set	3122.0002	Objective E PL 2x / 0.05 / ∞ / 0.17
3132.5201	Condenser darkfield dry (NA 0.70 - 0.90)	3122.0004	Objective E PL 4x / 0.10 / ∞ / 0.17
3133.5322	Condenser darkfield Cardioid (oil) (NA 1.25-1.36)	3122.0005	Objective E PL 5x / 0.10 / ∞ / 0.17
2460.2002	Heating stage 150x130cm Ambient to 50° C including controller	3122.0105	Objective E PL 10x / 0.25 / ∞ / 0.17
3122.1010	100x Infinity objective for darkfield observation	3122.0256	Objective E PL 20x / 0.40 / ∞ / 0.17
3100.5102	Phase contrast, complete, positive: turret condenser (4 phase annular	3122.0407	Objective E PL 40x / 0.65 / ∞ / 0.17 spring loaded
	stops) with iris diaphragm) 4 pos. phase planachromatic objectives	6329.0605	Objective E PL 50x / 0,65 / ∞ / 0.17 spring loaded
	10x/0,25 - 20x/0,40 - 40x/0,65 - 100x((oil))/1,25) and centring telescope	3122.0600	Objective E PL 60x / 0.85 / ∞ / 0.17 spring loaded
2480.2075	Cleaning set: lens cleaning tissues (20 pcs) + solution (75ml) + brush	3122.1009	Objective E PL 100x / 1.25 / ∞ / 0.17 (oil) spring loaded
2468.9905	Cable with UK plug and Euro connector, black 2m	3157.6902	1/2" C mount Adapter
2468.0699	Cable with US plug and Euro connector, black 2m	3157.2050	C mount adapter without lens (For Medline MPX Camera)
	Spares	3131.5601	Condenser aplanatic (NA 0,90) with flip-out top lens, iris diaphragm
3160.6444	Bulb halogen 12V/50W/G6 (Each)	3144.9353	Filter yellow Ø 38mm
3160.1053	Bulb halogen 6V/30W/G6 (Each) till serial no: 35723	3144.9364	Filter green Ø 38mm
3111.1006	Eyepiece pair 10x/22mm wide-field	3144.9312	Filter blue Ø 38mm
3113.1008	Eyepiece micrometer single 10x/22mm with cross line scale 0-10mm: 0,1mm	3144.9331	Filter ground Ø 38mm
2249.1001	Object micrometer with scale 1mm: 0,01mm used with micrometer eyepiece	2280.0101	Immersion oil 10 ml
	<u> </u>	2299.1524	Fuse 5 x 20/500 MA (10 pcs

CETI Inverted Microscopes are designed for the routine examination of tissue culture samples, cellular manipulation and general microbiology. These units are supplied with both brightfield and phase contrast as standard with the option to include fluorescence illumination, when required.

There are two series within the range:

TC Series:

With manual focusing, centring of the condenser and phase rings.

TC 100 Series:

With fixed pre-centred condenser, phase rings and a pre-focused condenser.

All units are supplied complete with objectives comprising 10x 20x 25x and 40x for both brightfield and phase contrast viewing, matching phase rings, trinocular port and ergonomic controls.

A full mechanical stage is included which has a variety of adaptors to hold a wide range of regular sized tissue culture flasks, Petri dishes, 96 well plates and slides. If required, the mechanical stage can be removed to allow for the examination of large flasks.

TECHNICAL SPECIFICATIONS

TC Series

The manual series has a trinocular head inclined at 30° and has 10x /18mm wide-field eyepieces with inter-pupillary distance adjustment (Siedendorf type) 55 - 75 mm.

Each unit is supplied complete with a trinocular head and a beam splitting prism for optimizing the halogen illumination. The long working distance planachromatic objectives and selection of eyepieces provide a magnification range from 40x to 800x.

The nosepiece is 4 position on the standard unit and 5 position on the fluorescence model. Also, it will accept the desired objectives from the six included as standard; (3 brightfield, 3 phase contrast) with coarse and fine coaxial focusing. The condenser contains the iris diaphragm, centring device and annular diaphragm for brightfield viewing (focusable with rack and pinion adjustment) and phase slider bars.

In the fluorescent version the phase rings are in a turret system beneath the condenser with a neutral brightfield viewing position for use with phase contrast.

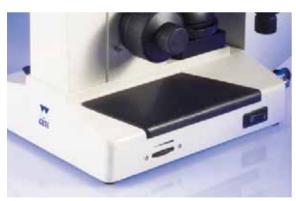
TC 100 Series

This new series is built upon the many fine aspects of the TC Series but has been updated to keep pace with contemporary microscope design.

The pre-centred trinocular head is inclined at 45° and has 22mm / 10x wide field eyepieces (Siedentopf type), adjustable from 48 to 75mm. A central removable glass stage plate enables easy selection of the desired objective on the quintuple inverted nosepiece. The pre-centred phase rings are on a single slider and pass through the condenser frame which has a blank position for use in brightfield mode. The epi fluorescent version is supplied complete with two filter blocks on an integrated slider mechanism:







INVERSO TC- inverted biological microscope

Product ref 3650.0000

This is an inverted microscope for both routine and research level work, complete with a trinocular head and a beam splitting prism for optimizing the halogen illumination. The long working distance planachromatic objectives and selection of eyepieces provide a magnification range from 40x to 800x.

The stage features a removable microplate holder with XY movement and the swing-out condenser allows tissue culture flasks up to 70mm thick to be viewed with ease.

FEATURES	
	T
Optical head	Trinocular, inclined at 30°
	Interpupillary distance adjustment (Siedentopf type) 55 to 75 mm
	Dioptric correction on one eyepiece tube
Eyepieces	10x/18mm wide-field
	Vertical photo/video port with beam-splitting prism on sliding mount (0-100%)
Nosepiece	Quadruple revolving with click stop, inverted
Objectives	Planachromatic
	PL 10x/0.25/160/1.2 LWD
	PL 25x/0.40/160/1.2 LWD
	PL 40x/0.60/160/1.2 LWD (Ceti Zi Objective)
Phase contrast	Planachromatic objective included PH+10x, 25x, 40x long working distance (LWD)
	10x, 25x,x40x annular phase plates
	Centring telescope
Condenser	(swings out, to accommodate tissue culture flasks)
	Annular slide diaphragm for brightfield, LWD N.A. 0.40
	Iris diaphragm
	Working distance; 30 mm
	Focusable with rack & pinion height regulation system
	Condenser centring device
Focusing	Coaxial coarse and fine
	Pre-focusing mechanism (on left knob)
	Tension adjustment ring (on right knob)
Illumination	Variable
	Halogen 6V/30W/G4
	Lamphouse lampholder adjustment and field diaphragm
	Filter holder green, yellow, blue filters
Stage	220x220 mm with built-in mechanical stage
	Transversal movement 110mm
	Longitudinal movement 75 mm
	2 interchangeable stage plates for differing containers
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter built-in low voltage (6V- electronic) with light intensity control
Packing	Supplied with 1 spare bulb, 2 spare fuses, 2 stage clamps, dust cover
	and instruction manual
	Packing 2 styrofoam shelves in cardboard box
	Dimensions 42x31x52cm (WxDxH) Gross weight 12 Kg



INVERSO TC EPI inverted biological microscope

with fluorescence

Product ref 3700.0000

Based on the Inverso, this microscope has a 30W halogen illumination and external fluorescent light (HBO 100W).

It is supplied complete with two sliding filter holders, one containing the blue and green filter blocks, the other the violet and UV filter blocks. Objectives consist of 10x, 25x, and 40x for both brightfield and fluorescent viewing, plus 10x, 25x, and 40x for phase contrast with the corresponding annular rings.

FEATURES	as for 3650.0000 except
Nosepiece	Quintuple revolving with click stop, inverted
Illumination	Reflected light 100W HBO external source with controller
	Power supply included
Stage	205x220 mm with built-in mechanical stage
	Transversal movement 80mm
	Longitudinal movement 112 mm
	3 interchangeable stage plates for Petri dishes (65mm 0D)
	Microscope slides and microtitre plates
Packing	Supplied with spare fuse, green and blue transmitted light filters, microtitre
	stage frame, rubber eye cups, dust cover and instruction manual.
	Packing 2 styrofoam shelves in cardboard box
	Dimensions 46x33x80cm (WxDxH)
	Gross weight 24 Kg

FLUORESCEN	T FILTER BLOCKS		
Filter colour	Excitation Filter	Barrier filter	Suitable for
B (blue)	420-485 nm	520nm	FITC
G (green)	460-550 nm	575nm	TRITC
UV (ultraviolet)	330-400 nm	420nm	
V (violet)	395-415 nm	450nm	

CODE	DESCRIPTION	
3650.0000	Inverso TC Inverted Microscope	
3700.0000	Inverso TC Inverted Microscope with fluorescence	
	Accessories	
3627.0100	Objective planachromatic 4x / 0.10 / 160 / 1,2 LWD	
3611.1604	Eyepiece pair 16x/11 mm wide-field	
3611.2006	Eyepiece pair 20x/11 mm wide-field	
6313.1008	Eyepiece micrometer single 10x/18 mm with cross line scale 0-10 mm 0,1 mm	
2249.1001	Object micrometer with scale 1 mm 0,01 mm used with micrometer	
	eyepiece for calibration	
	Spares	
2260.6430	Halogen 6V/30W/G4	
2299.1524	Fuse 5 x 20/500 MA	
2760.1003	100 W HBO bulb	



INVERSO TC100 inverted biological microscope

Product ref 3660.5000

The Inverso TC100 is ideal for the typical working laboratory and is built to a high quality specification. It is robust enough to withstand the rigours of constant daily use and is ideal for multiple usage as there is no manual adjustment.

<u> </u>			
FEATURES			
Optical head	Trinocular, inclined at 45°		
Optical licau	Interpupillary distance adjustment (Siedentopf type) 48 to 75 mm		
	Dioptric correction on one evepiece tube		
	1 71		
F	Vertical photo/video port with beam-splitting prism on sliding mount (80-20%)		
Eyepieces	10x/22mm wide-field		
Nosepiece	Quintuple revolving with click stop, inverted		
Objectives	Brightfield planachromatic		
	PL 4x/0.10/∞/1.2 LWD		
	PL 40x/0.65/∞/1.20 LWD		
	Phase contrast planachromatic		
	PH+ 10x / 20x / 40x LWD		
	10x / 20x / 40x annular phase plates		
	Centring telescope		
Condenser	N.A. 0.3 (removable)		
	Working distance; 72 mm		
Focusing	Coaxial fine and coarse		
	Pre-focusing mechanism (on left knob)		
	Tension adjustment ring (on right knob)		
Illumination	Halogen 6V/30W/G4		
	Lamphouse lampholder adjustment		
	Field diaphragm		
Stage	160x250 mm with built-in mechanical stage		
	Stage side extension		
Main Power	20-240V / 50-60Hz. (Euro connector)		
	Converter built-in low voltage (6V- electronic) with light intensity control		
Packing	Supplied with 1 spare bulb, 1 spare fuse, allen key (for condenser locking),		
	dust cover and instruction manual		
	Packing 2 styrofoam shelves in cardboard box		
	Dimensions 49x42x69cm (WxDxH)		
	Gross weight 16.5 Kg		



INVERSO TC100 inverted biological microscope

with fluorescence

Product ref 3660.8000

FEATURES as 1	for Inverso TC 100 but with fluorescence module	
Lamp	HBO 100W Ultra Hi-voltage Spherical Mercury Lamp	
Protection Barrier	Barrier to shield Ultraviolet Light	
Power Supply	Power supplier, 220V/110V inter changeable, digital display	

FLUORESCENT FILTER BLOOCKS			
Reflected light source	Excitation	Dichroic mirror	Barrier filter
Blue excitation	BP460~490	DM500	BA520
Green excitation	BP480~550	DM570	BA590

CODE	DESCRIPTION
3660.5000	Inverso TC100 Inverted Microscope
3660.8000	Inverso TC100 Inverted Microscope with fluorescence

Industrial compound microscopes use reflected light to view opaque materials at various magnifications. Available options include upright models for viewing thin materials and inverted models which have an open stage to allow for viewing large samples.



REFLEX trinocular microscope for industrial use Product ref. 6400.0000

This is a trinocular microscope with a vertical viewing port and beam splitting prism and an external lamp housing. The flat mechanical stage allows for observation of prepared subject matters with magnifications up to 1600x. It is available with optional eyepieces and objectives.

FEATURES			
Optical head	Trinocular, inclined at 30° with vertical photo port		
	Interpupillary distance adjustment (Siedentopf type): 55 to 75 mm		
	Dioptric compensation: on one eyepiece tube		
Eyepieces	10x/18mm wide-field,		
	Vertical photo/video port with beam splitting prism on sliding mount 0-100%		
Nosepiece	Reversed quadruple nosepiece with click stop		
Objectives	Planachromatic		
	PL 10x / 0.25 / 160		
	PL 40x / 0.65 / 160		
	PL 60x / 0.85 / 160 spring loaded		
Stage	Size 140x185mm with built-in graduated mechanical stage and stage clamps		
	70mm transversal movement		
	50mm longitudinal movement		
Focusing	Coaxial coarse and fine		
	Pre-focusing mechanism (on left knob)		
	Tension adjustment ring (on right knob)		
Illumination			
	Field and iris diaphragm for reflected light		
	Filter discs: green, yellow, blue and frosted		
	Supplied with: 1 spare bulb, 2 spare fuses, dust cover and instruction manual		
Polarisation	Built in polariser with removable analyser		
	Removable analyser		
Main Power	20-240V/50-60 Hz (Euro connector)		
	Converter: low voltage (6V- electronic) with light intensity control		
	Halogen 6V/20W/G4		
Packing	Two Styrofoam shelves in a cardboard box		
	Packing dimensions: 43x30x36cm (WxDxH) (Two cardboard boxes)		
	Gross weight: 9.5 kg		

CODE	DESCRIPTION	
6400.0000	Reflex Microscope planachromatic with 10x, 40x 60x objectives	
	Accessories	
3611.1604	Eyepiece pair 16x/11mm wide-field	
6313.1008	Eyepiece micrometer single 10x/18mm with cross line scale 0-10mm : 0,1mm	
2249.1001	Object micrometer with scale 1mm : 0,01mm used with micrometer eyepiece	
6329.0259	Objective planachromatic 20x / 0,40 / 160 / 0.17	
6329.1003	Objective planachromatic 100x / 0.85 / 160 / 0.17 (oil) spring loaded	
2757.2050	C mount adapter (For Medline MPX camera)	
2480.2075	Cleaning set: lens cleaning tissues (20 pcs) + solution (75ml) + brush	
	Spares	
2260.6425	Bulb halogen 6V/20W/G4 (10/PK)	
6411.1002	Eyepiece pair 10X/16mm wide-field	
6329.0106	Objective planachromatic 10x / 0,25 / 160 / 0.17	
6329.0401	Objective planachromatic 40x / 0,60 / 160 / 0.17 spring loaded	
6329.0602	Objective planachromatic 60x / 0,75 / 160 / 0.17 spring loaded	
6499.4318	Analyser	
2299.1524	Fuse 5 x 20/500 MA (10pcs)	



FEROX trinocular inverted materials microscope

Product ref. 6322.0000

This is an inverted, trinocular, reflected light microscope which is ideal for geological and engineering applications. The quadruple nosepiece accepts the 4 reflected light objectives while the open stage ensures that there are no height or size limitations on the subject material. The rear facing external lamp housing protects both subject and user from adverse heating effects.

FEATURES				
Optical head Trinocular, inclined at 30° with vertical photo port				
	Interpupillary distance adjustment (Siedentopf type): 55 to 75 mm			
	Dioptric compensation: on one eyepiece tube			
	Photo/Video port with beam splitting prism on sliding mount 0-100%			
Eyepieces	10x/18mm wide-field			
Nosepiece	Quadruple revolving with click stop			
Objectives Planachromatic LWD				
	PL 10x / 0,25 / 160			
	PL 25x / 0,40 / 160			
	PL 40x / 0,65 / 160 / spring loaded			
	PL 60x / 0.85 / 160 /spring loaded			
Stage	Size 150x180mm with built-in mechanical stage			
	Transversal movement: 14 mm			
	Longitudinal movement: 54m.			
	2 interchangeable stage plates			
Focusing	Coaxial coarse and fine			
	Pre-focusing mechanism (on right side knob)			
	Tension adjustment ring (on left side knob)			
Illumination	Halogen variable			
	External housing with condensing lens and field diaphragm			
	Iris diaphragm, centrable			
	Filters; yellow, blue, green (Ø32mm)			
	Incident Light: 6V/20W halogen lamp			
	Supplied with: 1 spare bulb, 1 spare fuse, one stage clamp, dust cover and			
	instruction manual			
Polarisation	Includes simple polariser and analyser			
Main Power	220-240V/50-60 Hz (Euro connector)			
	Converter: built-in low voltage (6V- electronic) with light intensity control			
Packing	Styrofoam in a cardboard box			
	Packing dimensions: 38x30x45cm (WxDxH)			
	Gross weight: 11 kg			

CODE	DESCRIPTION	CODE	DESCRIPTION
6322.0000	Ferox Microscope complete with 10x, 25x 40x, 60x objectives	6311.1006	Eyepiece pair 10x/18mm wide-field
	Accessories	6329.0106	Objective planachromatic 10x / 0,25 / 160
3611.1604	Eyepiece pair 16x/11mm wide-field	6329.0259	Objective planachromatic 20x / 0,40 / 160
6313.1008	Eyepiece micrometer single 10x/18mm with cross line scale 0-10mm :	6329.0401	Objective planachromatic 40x / 0,60 / 160
	0,1mm	6329.0602	Objective planachromatic 60x / 0,75 / 160
2249.1001	Object micrometer with scale 1 mm : 0,01 mm used with micrometer	6344.9612	Filter blue Ø 32mm
	eyepiece	6344.9653	Filter yellow Ø 32mm
6329.1003	Objective planachromatic 100x / 1,25 / 160	6344.9664	Filter green Ø 32mm
3657.2050	C mount adapter (For Medline MPX Camera)	6344.9631	Filter ground Ø 32mm
2480.2075	Cleaning set: lens cleaning tissues (20 pcs) + solution (75ml) + brush	6388.0631	Stage clamp, single
	Spares	2299.1524	Fuse 5 x 20/500 MA (10 pcs)
2260.6425	Bulb halogen 6V/20W/G4 (10/PK)		
2260.6425	Bulb halogen 6V/20W/G4 (10/PK)		



MAGTEX materials and biological use microscope

Product ref. 2763.000

The Magtex is based on the standard Magnum microscope in trinocular configuration using both transmitted and reflected light illumination. This enables the examination of both translucent and opaque materials. It is ideal for biological, geological and engineering applications.

FEATURES				
Optical head	Trinocular, including vertical photo/video port (Ø30mm) on sliding prism			
	Interpupillary distance adjustment (Siedentopf type): 53 to 75 mm Dioptric compensation: on one eveniece tube			
	Dioptric compensation: on one eyepiece tube 10x/18mm wide-field.			
Eyepieces	10x/18mm wide-field,			
Nosepiece	Quintuple reversed and revolving with click stop Planachromatic (CCS Optics)			
Objectives	Planachromatic (CCS Optics) PL LWD 5x / 0.12 / 160 / 0,17			
	· ' '			
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	PL LWD 20x / 0.40 / 160 / 0.17 spring loaded PL LWD 50x / 0.60 / 160 / 0.17 (oil) spring loaded			
Condenser	Precondenser with field diaphragm			
	Brightfield Abbe - NA 1.25			
	Iris diaphragm and filter holder			
	Centrable through a centring device			
	Focusable with rack and pinion height adjustment system			
Stage	Size 210x140mm with built-in mechanical stage and slide clip			
	Transversal and longitudinal adjustment by fingertip control			
	70mm transversal movement 50mm longitudinal movement			
	50mm longitudinal movement Nonius reading up to 0.1 mm			
	Nonius reading up to 0.1 mm Coaxial course and fine			
Focusing				
	Pre-focusing mechanism (on left knob) Tension adjustment ring (on right knob)			
	,			
Illumination	Halogen variable			
	External housing with condensing lens and field diaphragm			
	Iris diaphragm, centrable			
	Filters; yellow, blue, green (Ø32mm)			
	Incident light: 6V/20W halogen lamp			
	Reflected Halogen 6V/20W/G4			
	Supplied with: 1 spare bulb, 1 spare fuse, one stage clamp, dust cover and			
	instruction manual			
Polarisation	Includes simple polariser and analyser			
Main Power	220-240V/50-60 Hz (Euro connector)			
l	Converter: built-in low voltage (6V- electronic) with light intensity control			
Packing	Two Styrofoam shelves in a cardboard box			
	Packing dimensions: 68x50x50cm (WxDxH)			
	Gross weight: 15 kg			



MAGTEX Trinocular reflected and transmitted light microscope with polarisation

Product ref. 2783.0000

A research-grade, dedicated polarisation microscope complete with Bertrand lens and Lambda compensating plates. This unit also has both reflected and transmitted lighting.

FEATURES	As for Magtex with the following additions	
Objectives	Planachromatic tension free and parcentred, (CCS Optics)	
	Pol 4x / 0.10 / 160 / 0,17	
	Pol 4x / 0.10 / 160 / 0,17	
	Pol 40x / 0.65 / 160 / 0.17 spring loaded	
	Pol 60x / 0.80 / 160 / 0.17 (oil) spring loaded	
Lambda compensating plates included.		
Stage	180mm round polarisation stage	

CODE	DESCRIPTION		
2763.0000	Magnum Trino reflected and transmitted light Microscope		
2783.0000	Magnum Trino reflected and transmitted light polarising Microscope		
	Accessories		
2611.1205	Eyepiece pair 12.5x wide field		
2611.1607	Eyepiece pair 16x wide field		
2613.1005	Eyepiece with pointer		
2647.4805	Aluminium carry case		
2633.5303	Condenser darkfield Cardioid (oil) (NA 1.36-1.25)		
2757.2050	C-mount adapter 25mm without lens (For Medline Si3000 Camera)		
2644.9202	Filter neutral Ø 32mm		
2644.9211	Filter blue Ø 32mm		
2644.9229	Filter ground Ø 32mm		
2644.9258	Filter yellow Ø 32mm		
2644.9267	Filter green Ø 32mm		
2480.2075	Cleaning set: lens cleaning tissues (20 pcs) + solution (75ml) + brush		
2468.9905	Cable with UK plug and Euro connector, black 2m		
2468.0699	Cable with US plug and Euro connector, black 2m		

Industrial microscopes



Tritex II Triton II trinocular reflected and transmitted light microscope with darkfield Product ref. 3100.6000

The Tritex II is fully equipped to allow for the evaluation of samples in materials science. The microscope is supplied with both transmitted and reflected light sources and has in addition darkfield objectives which allow for the examination of highly reflective samples. The unit has 100W halogen illumination for both the transmitted and reflected light sources. DIC (Differential Integrated Contrast) dedicated variant for the 20x and 100x objectives. Further details available on request.

FEATURES	
Optical head	Trinocular, including at 30°
	Interpupillary distance adjustment (Siedentopf type): 48 to 75 mm
	Vertical photo/video port with beam-splitting prism on sliding mount
	Vertical height adjustment two positions 20mm
Eyepieces	10x/22mm wide-field (pair)
	Dioptric compensation: on one eyepiece tube
Nosepiece	Quintuple reversed and revolving with click stop
Objectives	E-plan infinity corrected(CCS Optics)
	E PL 5x / 0.12 / ∞ / WD 15.5mm BF
	E PL 10x / 0.25 / ∞ /WD 10.0mm BF/DF
	E PL 20x / 0.40/ ∞ /WD 4.30mm BF/DF
	E PL $40x / 0.65 / \infty / 0.17$
	E PL 50x / 0.75 / ∞ / WD 0.32mm BF
	E PL 100x / 1.25 / ∞ / 0.17
Condenser	Swing-out condensing lens – NA 0.90 / NA 1.25
	Koehler illumination centrable and focusable (external housing) with integrated
	field diaphragm and concentrating lens
	Iris diaphragm
	Swing out filter holder
Stage	Size 185 x 140mm with built-in mechanical stage and slice clip
	75mm transversal movement.
	55mm longitudinal movement
	Nonius reading up to 0.1 mm
Facusina	Maximum sample height 30mm Coaxial coarse and fine
Focusing	Pre-focusing mechanic (on left knob)
	Tension adjustment ring (on right knob)
Illumination	Variable
illullillation	Incident light Bulb Halogen 12v/100W/G6 koehler illumination and aspherical
	condenser
	Transmitted light 12v/100W/G6 koehler illumination swing out condenser
	NA0.9/0.25
	Filter: blue (diameter 38mm). Other colours available on application
Main Power	220-240V / 50-60Hz. (Euro connector)
	Converter: built-in low voltage (12V- electric) with light intensity control
Packing	Supplied with: 1 spare bulb, blue filter, 2 spare fuses, immersion oil 10ml, dust
	cover and instruction manual
	orror and moderate mandal

CODE	DESCRIPTION
3100.6000	Tritex II Trino 100W-Brightfield and Darkfield materials Microscope
3100.6500	Tritex II Trino 100W with integrated DIC 20x and 100x objectives Microscope

MEDLINE IMAGING SYSTEMS

There are a wide range of camera systems available which complement our extensive microscope range. Images can either be simply captured or additional detailed analysis can be performed, depending on the operation required. In addition, the cameras range from simple, low megapixel units to more sophisticated options. The cameras use either standard USB connection or, for the more sophisticated units, firewire connection with peltier cooling.





EYEPIECE CAMERAS

GLOBECAM SERIES

Entry level Camera for use as an eyepiece camera or available on a flexible arm for use as a 1:1 image capture system. Compete with software and USB output.

CODE	DESCRIPTION
9554.1019	Globecam D eyepiece camera
9554.7000	Globecam D on flexible arm

DEDICATED EYEPIECE CAMERAS

These are supplied with eyepiece adaptors' to fit into an eyepiece tube once they are removed.

The adaptors can be used with different diameter eyepieces. Simple software then allows for image capture.

CODE	DESCRIPTION
9554.1200	1.3Mpx USB digital camera with RCA output. Simple capture software
9554.1300	1.3Mpx USB digital camera and simple capture software
9554.3000	3Mpx USB digital camera and simple capture software
9554.5000	5Mpx USB digital camera and simple capture software
9554.9000	9Mpx USB digital camera and simple capture software

CMOS/CCD Digital	Cameras						
Model	MD130E	MD310	MD510	MD800	MD900		
Sensor Size	1/3"	1/2"	1/2.2"	1/2.5"	1/2.3"		
Pixel Size	8 µm×8 µm	3.2 μm×3.2 μm	2.2 μm×2.2 μm	1.75 μm×1.75 μm	1.75 μm×1.75 μm		
Sensitivity (v/lux-sec @550nm)	1.8	1.5	1.2	1.3	1.4		
Max Resolution	1280×1024	2048×1536	2592×1944	3264×2448	3488×2616		
(Hardware)	1.3M pixels	3M pixels	5M pixels	8M pixels	9M pixels		
Full Res. Frame Rate	20frames/sec	<11frames/sec	<7 frames/sec	<1 frames/sec	<1 frames/sec		
(Depend on the PC)	@ 1280×1024	@ 2048×1536	@ 2592×1944	@ 3264×2448	@ 3488×2616		
High-Speed Preview	N/A	N/A	N/A	YES	YES		
Video Mode	1280×1024	2048×1536	2592×1944	3264×2448	3488×2616		
	640×480	1024×768	1280×960	1600×1200	1600×1200		
	320×240	640×480	800×600	1280×1024	1280×1024		
		512×384	640×480	640×480	640×480		
Dynamic Range	65dB	75dB	68dB	75dB	75dB		
Wave Length(nm)	400-650nm (IR-Cut ad	ded)					
Exposure	ERS (Electronic Rolling	Snap)					
White Balance	Automatic / Advanced	Manual					
Auto-exposure	Automatic / Advanced	Manual					
Image Output	USB2.0, 480Mb/s						
Power Supply	USB2.0 DC 5V / 1.5 A						
Programmable Control	Image size, exposure t	ime, brightness, gain, gamma c	correction, colour, contrast, satu	ration			
Working Temperature	-30°C ~ 70°C						
USB Cable	USB cable, length 2.5n	n					
Accessories Included	2 adaptors (23.2 to 3	0, 23.2 to 30.50, one each) TS	-M1 stage micrometer availab	le at extra cost			
Output data	RGB24, Direct Show ar		-				
Software	Driver: support Direct Show and Twain						
	Image software: MiniS	Image software: MiniSee					
	Advanced Image-proce	essing software: ScopePhoto av	ailable for option at extra cost				
Operating System	Windows 2000 / Me / X	XP(SP2/SP3) / 2003 / Vista / 20	08 32Bit system				





DIGITAL SI 3000 3Mpx camera complete with full image analysis and capture software Product ref. 9556.3000

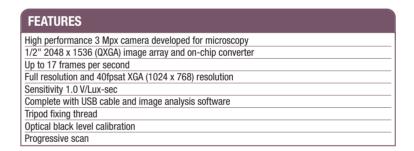
The new USB 2.0 – Si 3000 Mega pixel camera, using the latest 1/2" sensor technology and provides a frame rate up to 12 fps @ 2048 x 1536 pixels and 25 fps @ 1024 x 767. This ensures a smooth image at all times.

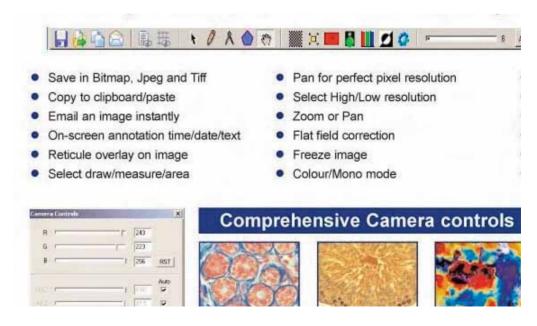
Digital ClarityTM sensor technology ensures delivery of high quality, crystal clear images at all times. This breakthrough in CMOS imaging technology can achieve CCD performance based on signal to noise ratio and low light sensitivity.

Achievable frame rate is typically 2-3 times the speed of a CCD at the same resolution.

This has major advantages when scanning slides under a compound microscope, as it allows the user to view the image more clearly whilst moving the slice, thus reducing errors and improving productivity.

Dual camera control panel allows the user to control the image automatically or to make finite changes to individual requirements. Image perimeters are stored for the next session.





CETI advanced professional digital camera systems

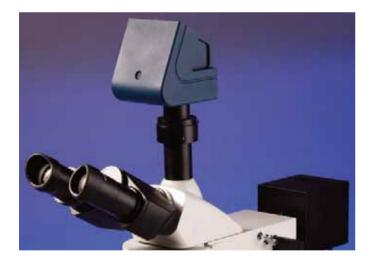
Professional ranges are all supplied complete with analysis software and have a range of Mpx resolution.

These high-quality CMOS and CCD cameras are suitable for all contrast methods in light microscopy and can be easily integrated via C-Mount and USB 2.0/ Firewire interfaces. The cameras are designed to provide rapid frame rates with low level power consumption.

Excellent image quality and fast live imaging.

True colour reproduction and a fine detail display, match that seen through the microscope due to the high resolution of the digital cameras. This ensures outstanding applicability for image analysis and reliable image documentation. The high frame rates provide fast, live images, thus offering easy workflow and convenient usage.

The colour or monochrome scientific cameras have the option of being cooled, have been optimized for tasks in scientific areas and meet the high requirements of low-light level camera applications, such as fluorescence.





User-friendly image capture software included.

All of the digital microscope cameras are supplied with premium image capture software, warranting easy handling and providing the user with a large variety of features for optimal image acquisition. Regular, free software updates for WINDOWS and MAC operating systems are available. Several camera drivers for direct integration of the standard software into more advanced professional image analysis software packages, e.g. for scientific or medical image analysis, are available, so extending the options for advanced image analysis by the user.

Application fields

Image analysis, documentation and archiving in microscopy such as:

- · Material science, geology and mineralogy
- Life science, diagnostics
- Quality control
- · Education and teaching

Optical connection C-Mount (0.5× or 0.63x TV pref., depends on the type of microscope) C-Mount (0.5× TV pref.)

CODE	DESCRIPTION
9556.3000	3 Mpx Medline SI 3000 Digital USB Camera, complete with professional analysis software
9556.5700	5 Mpx Medline SI 5000 Digital USB Camera, complete with professional analysis software
9557.5777	5 Mpx Medline SI 5000 Digital Firewall Camera, peltier cooled with complete with professional analysis software
9557.6140	1.4 Mpx Medline SI 1400 Digital USB Camera, complete with analysis software. (recommended for fluorescence)
9557.7000	7 Mpx Medline SI 7000 Digital Firewall Camera, complete with professional analysis software
9557.5712	12 Mpx Medline SI 12000 Digital Firewall Camera, complete with professional analysis software

Camera	SI1500USB	SI1555 USB	SI7000	SI1400	SI12000	
Image sensor	1/2" CMOS	2/3" CCD	1/2" CCD	2/3" CCD progress. scan	2/3" CCD 1.4Mpxprogress.	
					scan up to 12.5Mpx	
Colour / Monochrome	Colour / monochrome	Colour	Colour	Colour / Monochrome	Colour / Monochrome	
Sensor resolution [max]	2592 × 1944 pixel [5 Mpix]	2580 x 1944 pixel [5.0 Mpix]	3072x2304 pixel [7.1 Mpix]	1360 x 1024 pixel [1.4 Mpix]	1360 x 1024 pixel [1.4 Mpix	
Active sensor size [H x V]	5.70 mm x 4.28 mm	9.04mm x 7.86 mm	5.71 mm x 4.29 mm	8.8 mm x 6.6 mm	8.8 mm x 6.6 mm	
Pixel size	2.2 μm²	3.4 µm²	1.86 pm2	6.45 pm2	6.45 pm2	
A / D conversion	12 bit	12 bit	12 bit	12 bit	12 bit	
Pixel clock	48 MHz			12 MHz 24.5 MHz	12 MHz 24.5 MHz	
Dynamic range	66 dB	60 / 61 db	60 dB	65 67dB	65 67 dB	
Exposure times	150 μs 3 s	90 μs 180s	200 μs5s	20μs180s	20μs180s	
Analog gain	1x 5x (SDK)	1x 16x (SDK)	1x 16x (SDK)	1x 14x(SDK)	1x 14x(SDK)	
Max. frame rate	5.5 fps [2592 x 1944 pixel]	6fps [258]	11 fps [1228x920 pixel]	15 fps [1360 x 1024 pixel]	13 fps [1360 x 1024 pixel]	
[image size]	17 fps [1296 x 972 pixel]			26.5 fps [680 x 512 pixel]	51 fps [680 x 512 pixel]	
	50 fps [768 x 576 pixel]					
Image resolution Binning	2x, 4x	2x, 5 SDKx	4x (SDK) 614x466l1228x932	2x, 4x, 8x (SDK)	2x, 4x, 8x" (SDK)	
Cooling	No	Peltier	No	No	Peltier	
Optical connection		C-Mount (0.63x TV pref.)	C-Mount (0.5x TV pref.)	C-Mount (0.63x TV pref.)	C-Mount (0.63x TV pref.)	
Digital interface	USB 2.0	FireWire a	FireWire a	USB 2.0	FireWire a	
Trigger In / Out	Yes	No	No Yes		Yes	
Voltage supply	USB powered	FireWire powered	FireWire powered USB 2.0 powered		FireWire a powered	
Power consumption	approx. 1.8 W	approx. 1.8 W	approx. 6 W approx. 2.5 W		approx. 2.5 W	
Ambient conditions	Temperature: +5 °C +55	Temperature: 0 °C +35 °C	Temperature: 0 °C +35 °C			
	°C / Humidity: 5 % 80 %,	/ Humidity: 5 % 80 %, non	/ Humidity: 5 % 80 %, non			
	non condensing	condensing	condensing			
Storage conditions	-20 °C +70 °C	Temperature: -20 °C	Temperature: -20 °C			
Temperature		+70 °C	+70 °C			
Dimensions (L \times W \times H)	89 mm × 84 mm × 93 mm	145 mm x 93 mm x 123 mm	89 mm x 84 mm x 93 mm			
		FireWire	[USB]			
Weight approx.	700 g	Approx. 700 g	Approx. 700 g			
Application software			CapturePro for PC & MAC	CapturePro for PC & MAC	for PC(TWAIN); no MAC	
			(TWAIN only for PC)	(TWAIN only for PC	support	
SDK			SDK for PC, MAC & Linux for PC; no MAC support for PC; no N		for PC; no MAC support	
External camera driver			Available on request	Available on request	Available on request	



C mount fittings

These connect the camera to the microscope ensuring that parfocality is retained by placing the camera chip in the same focal plan as the eyepieces so that no re focusing is required when switching between manual or on screen viewing. Each C mount is specific to the relevant microscope series.

CODE	DESCRIPTION
9554.9999	Eye piece adapter for 1.3Mpx or 3Mpx camera
1202.4888	For Max II
2757.2050	For Magnum and Reflex
3157.2050	For Triton II and Inverso TC
3657.2050	For Inverso / Ferox
6757.2050	For Vertex
7357.2050	For New Steddy
7700.2345	For Varizoom

Additional software

To allow for more complex image processing, additional software packages are available which complement the standard software provided with the camera system.

All packages feature (as standard).

Live Measurement and Overlay Settings / Calibration (automatic & manual) / Extended Focus Imaging (EFI) / 3D Visualisation / Image Stitching / Live Image Comparisons / Time Lapse Capture and Movie File Production / Combine Image Planes (Fluorescence Imaging) / Import data into Excel / Large selection of Measuring and Analysis Functions (including annotation).

Then additionally more can be added as follows:

i-Solution Lite:

Manual measurements, including moderate image processing functions.

i-Solution:

Advanced image processing and enhancement, including both manual and automated image analysis.

Additional features include:

Auto & Manual Thresholding for Count and Size / Objects Editing (Enhanced measurement accuracy) / 43 Selectable Measurement Parameters / Densitometry / Perfect Focus Enhancement / Macro-Enabled Recording / Data Collector / Reflected Light Subtraction / Automatic count for Live and Stained Cells / Particle Analysis

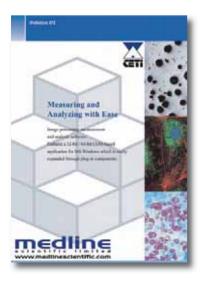
i-Solution DT:

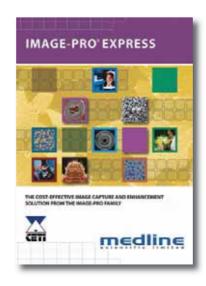
Premium software package incorporating all elements of image analysis found in i-Solution and i-Solution Lite, including motorized stage control and 3D analysis. Customized modules can also be added by request.

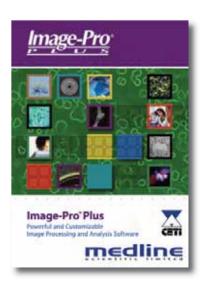
Additional features include:

Large size Object Measurement / Auto Edge Detector / Phase Analysis & Advanced Threshold / Thickness Measurement (Layer Depth Measurement) / Stereometry for Biovolume / 67 Selectable Measurement Parameters / Motorized Stage Control Image Stitching / 3D Reconstruction / Grain Size Measurement / Ferrite in Cast Iron / Graphite Analysis in Nodular Cast Iron / Non-metallic Inclusion Rating / Chart Navigator / Yarn Filament Analysis / Automatic Fruit Size

CODE	DESCRIPTION	CODE	DESCRIPTION
9600.1010	I Solution lite	Additional	Proprietary Brands
9600.1012	I Solution	9600.0011	Image Pro Express
9600.1013	I Solution DT	9600.0012	Image Pro Plus







Complementary products

A wide range of complementary products and accessories to the Ceti range is available.

Complementary products











GLASS SLIDES

Available with ground or cut edges and plain or with frosted ends for slide identification. Delivered in packs of 50.

CODE	DESCRIPTION
D100001	Deltalab Cut Edge Plain Slides 1.0
D100002	Deltalab Plain Ground Edge Slides 1.0
D100003	Deltalab Cut Edge Twin Frost Slides 1.0
D100004	Deltalab Twin Frost Ground Edge Slides 1.0

GLASS COVERSLIPS

A wide range of sizes to accommodate a wide range of samples and customer preferences.

CODE	DESCRIPTION
D101818	Deltalab Cover glass 18x18mm 1.5
D102222	Deltalab Cover glass 22x22mm 1.5
D102232	Deltalab Cover glass 22x32mm 1.5
D102240	Deltalab Cover glass 22x40mm 1.5
D102432	Deltalab Cover glass 24x32mm 1.5
D102440	Deltalab Cover glass 24x40mm 1.5
D102450	Deltalab Cover glass 24x50mm 1.5

SLIDE MAILERS

These allow for the safe postage and transportation of a small number of slides available in a variety of sizes up to 5 slide capacity.

CODE	DESCRIPTION
19923	Slide Mailing Container 1 slide flat
900025	Slide Mailing Container 2 slides container
979930	Slide Mailing Container 2 slides flat
19924	Slide Mailing Container 3 slides flat
900028	Slide Mailing Container 5 slides container

SLIDE STORAGE

Plastic slide boxes with capacities of 25, 50 or 1200 slides. Larger cabinet based systems are available for bulk storage.

CODE	DESCRIPTION
19276.A	Plastic slide box blue for 25 slides
19277.A	Plastic slide box blue for 50 slides
19278.A	Plastic slide box blue for 100 slides
19276.B	Plastic slide box beige for 25 slides
19277.B	Plastic slide box beige for 50 slides
19278.B	Plastic slide box beige for 100 slides

MICROSCOPE CLEANING KIT

A kit is comprised of lens cleaning tissue for removal of oil from immersion objectives, an air brush for routine dust removal, lens cleaning fluid and a cleaning cloth for cleaning eyepieces and glass components thus ensuring that the microscope is kept clean for optimal viewing.

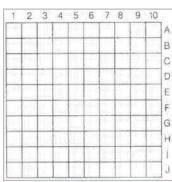
CODE	DESCRIPTION
2480.2075	Cleaning set: lens cleaning tissues (20 pcs) + solution (75ml) + brush

Accessories

Accessories

These are items which accompany the microscope to extend the flexibility of individual microscopes by offering additional components. Not all components are available for every microscope. Please refer to the accessories section under each microscope to check for a part number, which then confirms availability for that microscope.



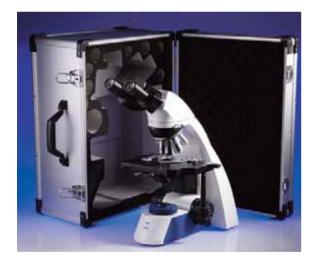


GRATICULES FOR USE IN THE EYEPIECE

These allow for the measurement of samples and come in a number of scale systems depending on the requirement. The graticule is mounted in the eyepiece as an integral unit. We offer the regular scaled reticule as standard within our microscope range. Other designs are available on request and are priced accordingly.

The common ones are:

Scaled reticule	Linear axis
	Divisions 50mm/500/0.1mm
	Dioptric compensation on one eyepiece
Crosshair reticule	Linear X & Y scaled axis
	Divisions 12mm/120 divisions
Multi Scale reticule	These glass reticles offer greater stability than film reticles
	which can bend, warp, and easily be damaged. Patterns are
	low reflection chrome deposition for high contrast and easy
	readability
Grid / Matrix reticule	Used for counting and referencing samples
Micrometer slides	Horizontal micrometer scales and crossed micrometer scales.
PLEASE NOTE M	ANY OTHER CONFIGURATIONS AVAILABLE ON REQUEST





MIRROR ATTACHMENT

This allows for the use of natural daylight or an external light source to illuminate the sample. These options are ideally suited for the educational microscopes and are not found on the higher specified research microscopes which require more powerful lighting sources to view the sample.

Accessories



POLARISATION KITS

These allow for the polarisation technique to be examined as well as make some simple measurements with the sample.



PHASE CONTRAST KITS

These allow for the retro fitting of a phase contrast system to upright compound microscopes so increasing the flexibility of the microscope. We offer a simple and a more complex version simple version.

Simple version:

3 objectives and separate removal condensers with dedicated built in phase ring

Interpupillary distance adjustment (Siedentopf type): 50 to 75 mm

Dioptric compensation: on one eyepiece

Complex version 4 objectives with phase ring carousel unit containing the phase rings



ADDITIONAL EYEPIECES

These allow for differing magnifications to be used with the standard objectives and are microscope specific, again check the accessories for availability per microscope. Differing magnifications come with differing diameters.

magnifications come with amorning diameters.		
Eyepieces	5x	
	15x	
	16x	



ADDITIONAL OBJECTIVES

These allow for differing magnifications to be used to examine the samples and complement the standard objectives on the microscope. The standard objectives are 4x, 10x, 40x and 100x oil (where included) magnification come with differing diameters.

Additional Objective Magnifications Stereo microscopes

0.5, 0.75 2					
Additional Objective Magnifications Compound microscopes					
5x.	20x.	50x.	60x.	80x.	



SLIDE MICROMETER		
Scale micrometer	Linear axis	
	Divisions 50mm/500/0.1mm - clear slide	
	Standard slide is clear, black background available on request	

Accessories

Heated Stages

This allows for live samples to be examined at a specified temperature $< +/-1^{\circ}$ C from 200°C > room temperature to 500°C. The stage offers an accurate temperature control platform for upright microscope applications for slide mounted samples. The stage is secured by adhesive tape once the slide clip has been removed and the preset temperature is reached within 1 – 2 minutes.



SPECIFICATIONS		
Power	50W	
Temperature range 200°C > room temperature to 500°C		
Temperature display	0.10°C	
Set and actual temperature variation +/-10°C		
Stage mechanism	150x130x5.8mm attachment with a number of mounting holes	

SYSTEM COMPRISES	
Temperature controller	LED actual and set temperature display screens with up/down setting buttons ON/OFF switch at the rear
Temperature controlled stage	built-in heater and heat sensor size 150mm x 130mm x 5.8mm

CODE	DESCRIPTION
2460.2002	Heating stage for upright microscopes 150x130cm to 50°C – complete with tempera-
	ture control

Motorised Stage and Controller

This is an accurate yet economical motorised stage system ideal for applications such as fluorescent image data acquisition, slide scanning, multi-well plates, Petri dish analysis and metallurgical analysis. The stage is controlled by the MD11 and is compatible with the world's leading image analysis software programs. A joystick option is also available.



SPECIFICATIONS		
Travel range	126 mm x 76 mm	
Minimum step size	0.1µm	
Max load	5kg	
Max Speed	8mm/s	

CODE	DESCRIPTION
2441.1010	MDES111 motorised stage assembly
2441.5075	MDES10 power controller unit
2460.95950	MDCS152DP Joystick controller



Other Medline Product Ranges

Refractometers and Spectrophotometers

These are complementary optical products which complete the Ceti range. The refractometers range from hand held DIGIT series, to sophisticated bench units with either an optical or digital display.



Deltalab

A comprehensive range of laboratory consumables and disposables for use in all routine laboratories for health, hygiene, food, environmental and analytical laboratories.

The ranges comprise of:

- Swabs
- Sample Containers
- Pasteur pipettes
- PCR and Cryostorage vessels
- Molecular Biology
- Sampling and transport
- Safety
- Histology, microbiology biochemistry and haematology



Jeiotech

Laboratory equipment for temperature control incubation and agitation techniques using water or air as the control medium covering:

- Incubators
- Shakers and incubated shakers
- Ovens
- Water baths



Heating Mantles

These single position units are available in a variety of sizes from 50ml – 20L and feature built in controlled heating.





medline

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