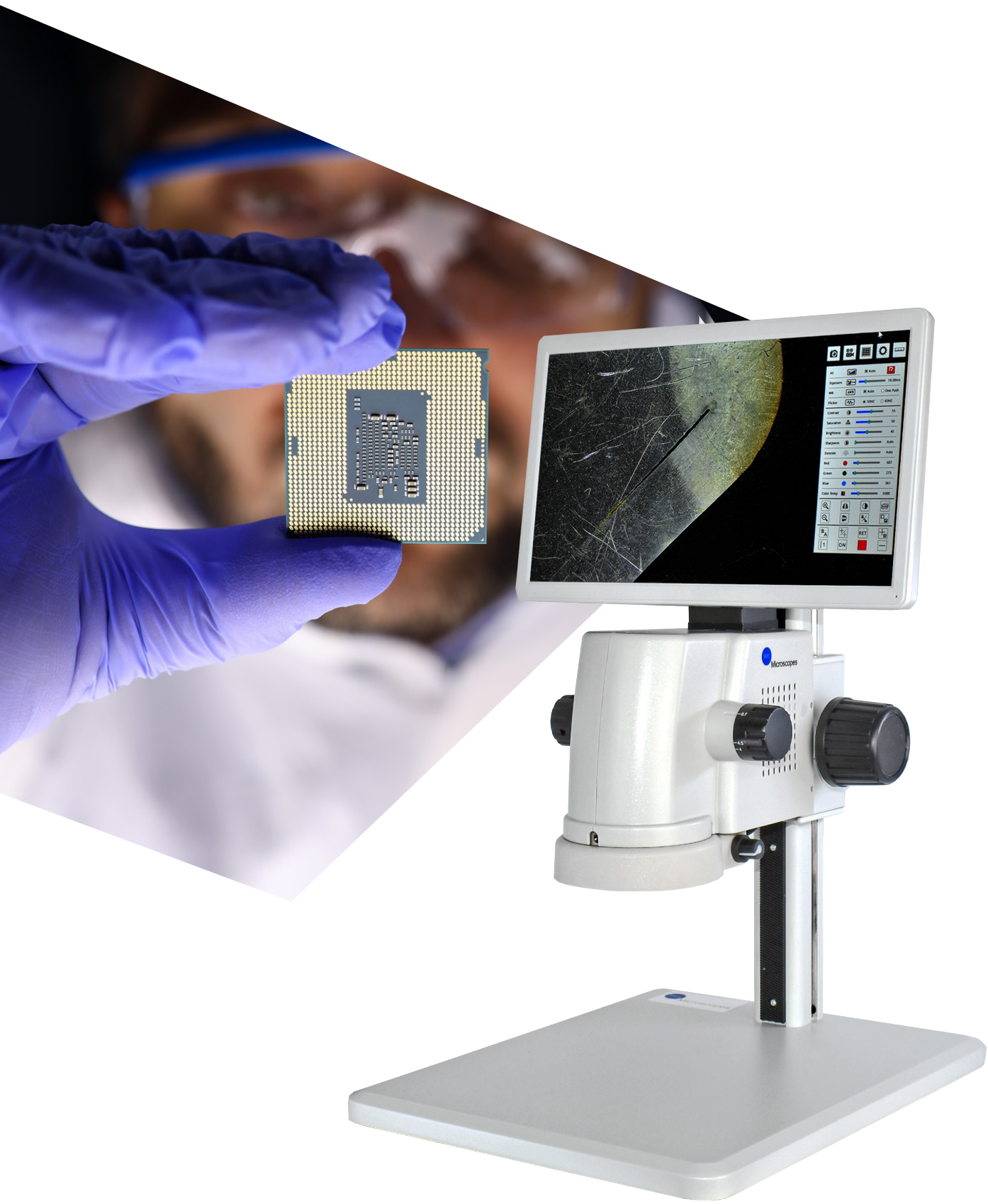
BMS

Microscopes



BMS INSPECTION

BMS SMARTSCOPE INSPECTION MICROSCOPE
Page 03

BMS INSPECTION MICROSCOPES
Pages 04 - 11

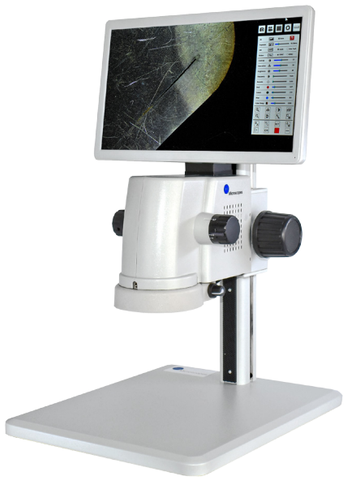
BMS INSPECTION MICROSCOPES STEREO XL
Pages 12 - 14

BMS DIGITAL CAMERAS
Pages 15 - 18

BMS ILLUMINATION
Pages 19 - 20

BMS STANDS
Pages 21 - 22

BMS SMARTSCOPE INSPECTION MICROSCOPE



756460 Smartscope inspection microscope

Smartscope inspection microscope comes with pillar stand and 12 inch LCD monitor with a high ratio zoom lens and built-in CCD camera. This series of microscope offers a large zoom range, long working distance, especially LCD monitor display, which is a perfect instrument for industrial inspection.

- Objective: Zoom 0.7x ~ 4.5x, ratio 7:1
- Total Magnification: 17.2x-110.5x
- Working Distance: 100 mm
- Built-in: software for measurement and control
- Stand size: vertical height: 350 mm, maximum focusing distance: 220 mm
- Base Size: 320 x 260 x 16 mm
- Illumination: 56-LED ring light with intensity control
- Parallel HDMI output
- External memory: 1x Mini SD card slot, 1x USB
- External power supply, input 100 ~ 240 V AC 50/60 Hz, output DC 12 V/2 A

Complete delivery with:

- 1x LCD Monitor
- 1x Metal Microscope Stand
- 1x Microscope Objective Body
- 1x Power Cable
- 1x Dust Cover
- 1x Wireless mouse
- 1x SD-card for storage of images

www.bmsmicroscopes.com

BMS INSPECTION MICROSCOPES Head & Height control

A modular program that allows you to compose a stereo zoom microscope system from several items. It gives the freedom of a tailor made stereo microscope and the free choice of an imaging possibility. The core lies in the microscope heads from the BMS 130/133 and the BMS 140/143 series, a range with proven quality. Added is a variety of stands, with or without illumination. Besides this there is the possibility of composing a monozoom inspection system. Mainly for observations done immediately with a camera system. To make it all a complete observation, inspection and documentation station, a complete range of cameras is also available.

ASSEMBLE AN INSPECTION MICROSCOPE IN SIX STEPS.

1. Choose the microscope head

BMS 130 & BMS 133 HEAD

Bino 130

Trino 133

BMS 140 & BMS 143 HEAD

Bino 140

Trino 143

BMS Smartscope monocular zoom head

75644 Mounting Ring 50/75 mm

2. Choose the height control

75060 Coarse focusing

75063 Coaxial coarse and fine focusing

3. Choose the stand

749475* Stand BMS 133
with illumination

* DIAMETER GLASS PLATE/BLACK AND WHITE SPECIMEN HOLDER 95 MM

749476* Stand BMS XL Stereo microscope
with LED illumination

74998 BMS boom stand
Standard

CHECK PAGES 21 & 22
FOR MORE INFORMATION

74996 BMS boom stand
Universal

74997 BMS boom stand
Extra heavy

4. Choose the illumination

Make sure the ring light can be mounted on the objective lens of the stereo microscope with these non-optic mounting ring adapters:

75020 Objective ring with lens 0x
* Ø 55 mm

75021 Objective ring without lens
* Ø 55 mm

	LED BULBS	
	60	80
STANDARD	75724	757245
4Q VERSION	75723	757235

CHECK PAGES 19 - 20
FOR MORE INFORMATION

Or choose a cold light source

7572759 Fiber optic cable
dual goose neck

757352 Ring light with
flexible arm

7572757 Cold light source
LED 24 W without optical

7572755 Cold light source
LED 24 W with optical

7572756 LED light box
without optical guide

999850030 LED light box
without optical guide

999850015 Xenons light box
without optical guide

5. Choose the BMS camera

76601080HA Camera, HDMI+USB, 2MP

76601080PHB Camera, HDMI+USB, WiFi

4K VERSION

76604K8MPA 4K camera, HDMI+USB, WiFi+RJ45+SD card

AUTOFOCUS VERSION

76601080HAAF AutoFocus camera, HDMI+USB+AF 2MP SD card

CHECK PAGES 15 - 18
FOR MORE INFORMATION

MegaPixels	USB CMOS camera	
	2.0	3.0
3 MP	766603100AK1	766103100AK1
5 MP	766605100AK1	766105100AK1
10 MP	766610000AK1	766110000AK1
14 MP	x	766114000AK1

6. Choose the accessories

AUXILIARY LENSES for BMS 130, 133, 140 & 143		
Item no.	Lens	WD
74990	0,5 x	WD 165 mm
74991	1,5 x	WD 45 mm
74992	2,0 x	WD 30 mm

EYEPIECES	
Item no.	Widefield
74982	WF 10x / 22
74983	WF 15x / 15
74985	WF 20x / 10

AUXILIARY LENSES for SmartScope		
Item no.	Lens	WD
75646505	0,5 x	WD 165 mm
7564652	2,0 x	WD 30 mm

749602 Polarization set 140 & 143 series (Ø 95 mm)

75035 Mechanical stage with coaxial knobs for XY movement

760605 Photo adapter universal

756465040 35º View Angle Attachment for Smartscope

TWO EXAMPLES:

STEPS	PARTS
1. Microscope head	Bino head, 130 serie
2. Height control	75063 Coaxial coarse and fine focusing
3. Stand	74997 BMS boom stand Extra heavy
4. Illumination	757235 Ring light 4Q version, 80 LEDs
5. Camera	-
6. Accessories	74982 Eyepiece WF 10/22 mm

BMS INSPECTION MICROSCOPES Examples

STEPS	PARTS
1. Microscope head	Trino head, 130 serie
2. Height control	75063 Coaxial coarse and fine focusing
3. Stand	74998 BMS boom stand Standard
4. Illumination	757235 Ring light 4Q version, 80 LEDs
5. Camera	76601080PHB Camera, HDMI+USB, WiFi
6. Accessories	74982 Eyepiece WF 10/22 mm

BMS INSPECTION SYSTEM COMPOSITION FORM

Please follow the guide and fill in below tabel to compose an inspection microscope system. The first three steps are required. Please send your order form to info@bmsmicroscopes.com.

STEPS (Required)	PART	TICK AT LEAST ONE PART
1. Microscope head	BMS Bino 130	
	BMS trino 134	
	BMS Bino 140	
	BMS Trino 143	
	BMS Smartscope monocular zoom head	
2. Height control	Coarse focusing (75060)	
	Coaxial coarse & fine focusing (75063)	
3. Stand	Stand BMS 133 with illumination (749475)	
	Stand BMS XL Stereo microscope, LED illumination (749476)	
	74998 BMS boom stand Standard	
	BMS boom stand Universal (74996)	

STEPS (Additional)	PART	PROVIDE ARTICLE CODE(S)
4. Illumination	See page 6	
5. Camera	See page 7	
6. Accessories	See page 8	

76251 Stereo microscope BMS ST-50

- Eyepieces: two WF 10x/20 mm, locked
- Tubes: 45° inclined, one tube with adjustable diopter
- Interpupillary distance: 50 mm to 76 mm adjustable
- Objective: long working distance, objective pair 1x in slide holder, not exchangeable
- Head: adjustable in height
- Focusing: coarse focusing knobs with slip clutch
- Illumination: incident illumination, with regulation, LED and one LED's on flexible arm
- Magnification: 10x
- Working distance: 220 mm
- Power connection: 230 V
- Detachable power cord
- Including dust cover, tension wrench and eye caps

MOST CHOSEN CONFIGURATION

XL Stereo microscopes	Stereo zoom BMS 133, LED	Stereo zoom BMS 133, Trino, LED	Stereo BMS 140 Bino Zoom, LED	Stereo BMS 143 Trino Zoom, LED
Article code	74940	74945	749555	749575
Eyepiece: WF 10x/22 mm	✔	✔	✔	✔
Tube: 45° inclined	✔	✔	✔	✔
Head: binocular 360° rotatable	✔		✔	
Head: trinocular 360° rotatable		✔		✔
Zoom objective: stepless adjustable 0,7x to 4,5x	✔	✔	✔	✔
Magnification	7x to 45x	7x to 45x	7x to 45x	7x to 45x
Focusing: coarse Focusing knobs on both sides with tension control	✔	✔	✔	✔
Height adjustment by the pole by rack & pinion	✔	✔	✔	✔
Handle for easy carrying	✔	✔	✔	✔
Illumination LED	✔	✔	✔	✔
Power connection: 230 V/ 50 Hz	✔	✔	✔	✔
Including: dust cover and eye caps, frosted glass disc, manual and detachable power cord	✔	✔	✔	✔

BMS INSPECTION MICROSCOPES STEREO XL

74940 Stereo BMS 133,
Bino zoom, LED

74945 Stereo BMS 133
Trino zoom, LED

Most chosen configurations

749555 Stereo BMS 140
Bino zoom, LED

749575 Stereo BMS 143
Trino zoom, LED

Digital cameras	USB2.0, 5MP kit	USB2.0, 10MP kit	USB2.0, 14MP kit	USB3.0, 5MP kit	USB3.0, 10MP kit	USB3.0, 14MP kit
Article code	766605100AK1	766610000AK1	766614000AK1	766105100AK1	766110000AK1	766114000AK1
Sensor Type CMOS Aptina	✔	✔	✔	✔	✔	✔
Sensor Size (mm)	5.70 x 4.28	6.44 x 4.616	6.138 x 4.603	5.7 x 4.28	6.44 x 4.616	6.451 x 4.603
Pixels	5 MP	10 MP	14 MP	5 MP	10 MP	14 MP
Resolutions	2592 x 1944	3584 x 2748	4096 x 3288	2560 x 1922	3584 x 2746	4096 x 3286
Connectivity	USB 2.0	USB 2.0	USB 2.0	USB 3.0	USB 3.0	USB 3.0
Lens-mount: C-mount	✔	✔	✔	✔	✔	✔
Compensating Lens	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x
Power: DC 5 V USB Port	✔	✔	✔	✔	✔	✔

BMS_pix3 Windows Version

- Live video preview
- Captures still images and video
- Time-lapse capture
- Exposure and white-balance controls
- Dark field correction
- Digital binning
- Image processing
- Measurement tools, including lines, arcs, polygons
- Segmentation and counting tools
- Image-stitching, extended depth-of-field, HDR
- Fluorescence colour-mapping

BMS_pix3 Mac/Linux Versions

- Live video preview
- Captures still images and video
- Exposure control
- Colour adjustment
- Measurement tools, including lines, arcs, polygons

In the box you will find:

- Camera
- Software CD with BMS_ pix3 and complete manual (English)
- Calibration slide
- Microscope adapters with optics
- Two tube size adapters (23,2 mm to 30,0 mm and 23,2 mm to 30,5 mm)
- USB cable

The camera body, made from tough zinc alloy, ensures a heavy duty workhorse solution. No moving parts included.

The camera is designed with a high quality IR-CUT to protect the camera sensor.

HDMI camera

763696 HDMI camera

Through standard HDMI interface to stream the video to displayer or HDTV. Easy connecting to other equipment with the C-mount optical interface. High resolution and high frame rate, perfect colour reproduction, highly integrated and compact, low failure rate and stable performance.

- Sensor size (mm): 4.8 x 3.6
- Pixel(µm): 3.75 x 3.75
- FPS/Resolution: 30@1080x720
- Exposure: 0.21ms~2000ms
- Lens: C-mount lens
- Cable: HDMI
- Memory Card: SD card
- Mouse: USB mouse/USB wireless mouse
- Width x depth x height: 50 mm x 50 mm x 61 mm

1. HDMI output port connected to the HDMI diaplayer
2. The blue LED indicator
3. USB mouse
4. Power supply DC 5 V/1 A power adapter
5. SD card slot

In the box you will find:

- Camera
- Software CD
- Calibration slide
- Microscope adapters with optics
- Two tube size adapters (23,2 mm to 30,0 mm and 23,2 mm to 30,5 mm)
- HDMI cable
- USB cable
- SanDisk Ultra SDHC card 16 GB
- Power supply 5 V/1 A DC
- Mouse

HDMI+USB, WiFi

HDMI and WiFi are used to transfer the data to either a HDMI display (screen) or to a computer. For HDMI output: the camera control panel and toolbar are displayed on the HDMI screen. In this case the USB connected mouse can be used to set the camera and control it. For WiFi output: plug the WiFi adapter in the USB port of the camera. Connect the computer (smartphone or tablet) to the camera and open the BMS_Pix3 App. The camera can now be controlled by the computer via the on screen display.

76601080PHB Camera, HDMI+USB, WiFi

- Sensor size (mm): 5.5 x 3.4
- Pixel(µm): 2.8 x 2.8
- FPS/Resolution WiFi: 60@1920x1080
- Exposure: 0.4ms~999ms
- Lens: C-mount lens
- Cable: HDMI
- Memory Card: SD card 4 GB or more
- USB camera or USB mouse
- Width x depth x height: 78 mm x 70 mm x 92 mm
- Operating system: Windows 7/8/8.1/10 (32 & 64 bit) Mac OS X, Linux

4K, HDMI+USB, WiFi+RJ45+SD card

4K

All in one C-mount 4K camera (HDMI, WiFi, RJ45, SD card) with high sensitive and ultra high performance Sony CMOS sensor.

Simultaneous HDMI and WiFi output. Mouse control through USB connection. Built-in image capture and video record through SD card. On screen camera control panel by mouse. On screen toolbar with zoom, mirror imaging, freeze, cross and browser functions.

Ultra fine colour engine with perfect colour reproduction capability.

HDMI, RJ45, USB and WiFi are used to transfer the data to either a HDMI display (screen) or to a computer.

For HDMI output: the camera control panel and toolbar are displayed on the HDMI screen. In this case the USB connected mouse can be used to set the camera and control it.

For WiFi output: plug the WiFi adapter in the USB port of the camera. Connect the computer (smartphone or tablet) to the camera and open the BMS_Pix3 App. The camera can now be controlled by the computer via the on screen display.

76604K8MPA 4K, HDMI+USB, WiFi+RJ45+SD card

HDMI+USB, 2 MP

76601080HA Camera, HDMI+USB, 2MP

- C-mount camera with high sensitivity CMOS sensor
- Simultaneous HDMI & USB output
- Built-in mouse control
- Built-in image capture & video record to SD card
- Built-in camera control panel for mouse control
- Built-in toolbar including zoom, mirror, comparison, freeze, cross, browser functions
- Built-in image & video browsing, display and play
- Ultra-Fine colour engine
- With advanced video & image processing application ToupView
- Support standard UVC for Windows/Linux/Mac(USB)
- The camera can be used for microscope, industrial stereo microscope and on-line inspection

- Sensor size (mm): 5.5 x 3.4
- Pixel(µm): 2.8 x 2.8
- FPS/Resolution: 60@1920x1080
- Exposure: 0.4ms~999ms
- Lens: C-mount lens
- Cable: HDMI
- Memory card: SD card 4 GB or more
- USB camera or USB mouse
- Width x depth x height: 78 mm x 70 mm x 92 mm

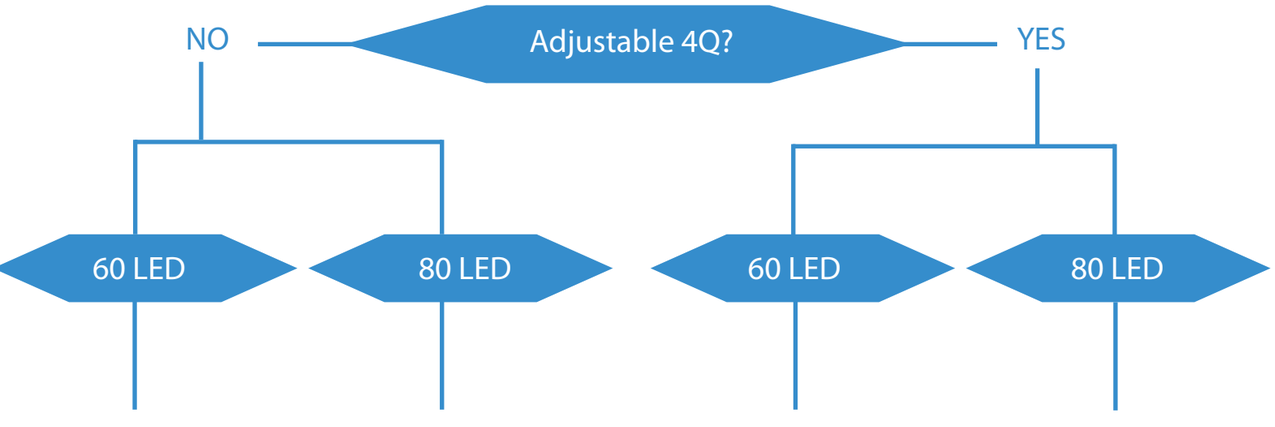
In the box you will find:

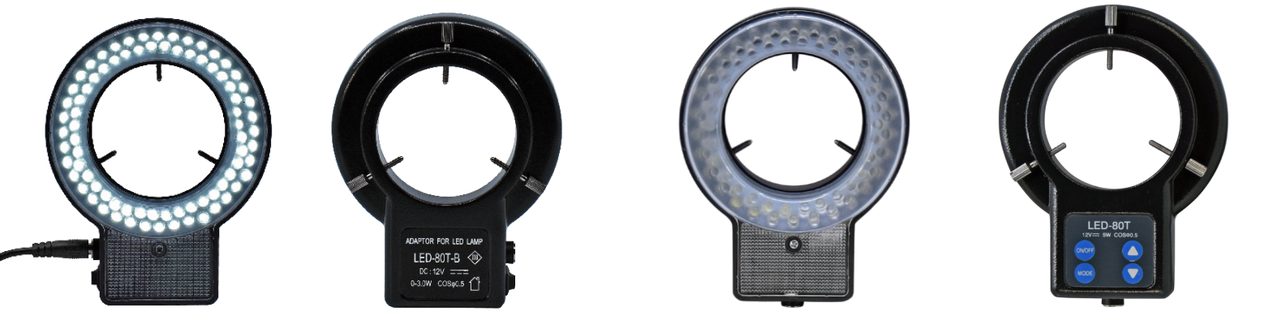
- Camera
- Software CD
- Calibration slide
- Microscope adapters with optics
- Two tube size adapters (23,2 mm to 30,0 mm and 23,2 mm to 30,5 mm)
- HDMI cable
- USB cable
- SanDisk Ultra SDHC card 16 GB
- Power supply 5 V/1 A DC
- Mouse

AutoFocus version

76601080HAAF AutoFocus camera, HDMI+USB+AF 2MP SD card

RING LIGHT





75724 Ring light 60 LEDs, adjustable

757245 Ring light 80 LEDs, adjustable

75723 Ring light 60 LEDs, adjustable 4Q

757235 Ring light 80 LEDs, adjustable 4Q

LED WITH
0 ... 100% VARIABLE INTENSITY LIGHT CONTROL

LED WITH
8 STEP VARIABLE INTENSITY LIGHT CONTROL

More specifications

- Inner Ø: 60 mm
- Mounting Ø: 45 to 60 mm
- Colour temperature: 6500 K
- Working distance: 50 ... 150 mm
- Input voltage: 12 V DC, 600 mA
- Including Euro power supply 12 V DC/100 ... 240 V AC

Suitable for BMS microscopes series 133, 140, 143. For the other BMS microscopes, the purchase of adapter ring 75021 is necessary.

60 LEDs = 6500 LUX

80 LEDs = 8500 LUX

Cold light source LED 24 W

7572755 Cold light source LED 24 W

This light source projects brilliant white light (natural colour). Ideal for temperature critical applications.

Light is transported through a fibre optic system from source to object. Produces no heat near the object. The heat stays in the housing and is transported without mechanical cooling. This LED light source therefore makes no sound.

Includes a double flexible fibre optic light guide with focusing lenses at the end. The light beam can be focused by the lenses. The gooseneck allows specific positioning of the light beam. Possibility to fit colour filters in the fiberglass holder.

The following colours are available: yellow, green, red and blue.

- Main power : 90~240 V, 50 Hz
- Fuse: T 250 V/5 A
- ESD safe
- RoHS
- CE
- Fiber optics: two-armed with focusing lens
- Colour temperature: 6000~7000 K
- Fiber optics port: 5/8 inch
- Bulb : 24 W LED
- Bulb life: 10.000 hours
- Lamp housing: space-saving
- Detachable power cord

ALSO AVAILABLE SEPARATELY

7572759 Fiber optic cable dual goose neck

7572757 Cold light source LED 24 W without optical guide

More cold light sources:

7572756 LED light box without optical guide

999850030 LED light box without optical guide

999850015 Xenons light box without optical guide

HOLDS STEREO MICROSCOPE HEAD AND CARRIER FROM THE BMS 130/133 AND BMS 140/143 RANGE. ALSO HOLDS OTHER STEREO MICROSCOPE HEAD CARRIERS WITH A DIAMETER OF 32 MM.

749475 Stand BMS 133 with illumination

- Base size: 27 x 21 cm
- Height of pillar: 30 cm
- Diameter pillar: Ø 32

749476 Stand BMS XL Stereo microscope with LED illumination

- Base: 21 x 37 cm
- Height of pillar: 25 cm
- Diameter pillar: Ø 32

74998 Boom stand for BMS 11, 30 to 144 X- and Y-axis

Movement of arm over a ball bearing system, guarantees smooth and precise movement. Pillar can be attached on short side of base or on the long side. Holds stereo microscope head and carrier from the BMS 130/133 and BMS 140/143 range. Also holds other stereo microscope head carriers with a pillar diameter of 32 mm.

- Length arm: 59 cm
- Base: 28 x 38 cm
- Height of pillar: 35,5 cm
- Diameter pillar: Ø 32

74996 Universal stand for BMS 11, 130 to 144, movement in X-, Y- and Z-axis

- Extra heavy version
- Table mounting
- Height of pillar: 50 cm
- Head not included

74997 Boom stand for BMS 11, 130 to 144, extra heavy version, movement in X-, Y- and Z-axis

- Base size: 26 x 21 cm
- Diameter pillar: Ø32 x 42 cm
- Horizontal arm: 55 cm
- Head not included

HOW TO ORDER

Step 1: Select product(s) from this catalogue

Step 2: Order easily in one of the three ways:

ONLINE	BY PHONE	BY EMAIL
www.bmsmicroscopes.com	+ 31 10 458 42 22	info@bmsmicroscopes.com

Placing an order through the webshop is the fastest & most convenient way to order.

First of all you will save time and most important you can see your prices (inclusive discount) directly, after login.

If you would like to place an order by phone or email, please ensure that your order contains the following information:

- Your order number, contact name, telephone number, shipping address and your VAT number
- If you are placing an order on the basis of a specific quotation, please advise us on our quotation reference no.

HEAD OFFICE

BMS Microscopes b.v.
Essebaan 50
2908 LK Capelle aan den IJssel
The Netherlands

CC number 64035557
VAT number NL855495777B01

SALES OFFICE HOURS

Monday to Thursday
08:00 am to 16:30 pm

Friday
08:00 am to 14:30 pm

Saturday and Sunday
Closed

PAYMENT METHODS

We accept the following:

- By wire transfer

Please note:

- Images used in the catalogue are for graphical representation only; actual products may vary from those shown.
- Accessories used to illustrate the use of main items are not always supplied automatically. If in doubt, please ask.
- All prices in Euros excluding transport and VAT.
- On all technical devices BMS Microscopes gives a 5 (five) full years guarantee (excluding cameras which have 2 years guarantee) .

If a product within the warranty period does not function or no longer functions properly, the customer must report this as soon as possible in writing to BMS Microscopes. To return the product itself, it must await the return instructions from BMS Microscopes.

For more info about the sales conditions please go to: http://extern.bmsmicroscopes.com/Terms&conditions_BMS.html

Article code 99985

BMS Microscopes b.v.
Essebaan 50
2908 LK Capelle aan den IJssel
The Netherlands

+ 31 10 458 42 22
info@bmsmicroscopes.com

www.bmsmicroscopes.com

© BMS Microscopes b.v. All rights reserved