Motic®
DIGITAL MICROSCOPE

The **Motic** Digital Microscope *patent pending*
DMB5
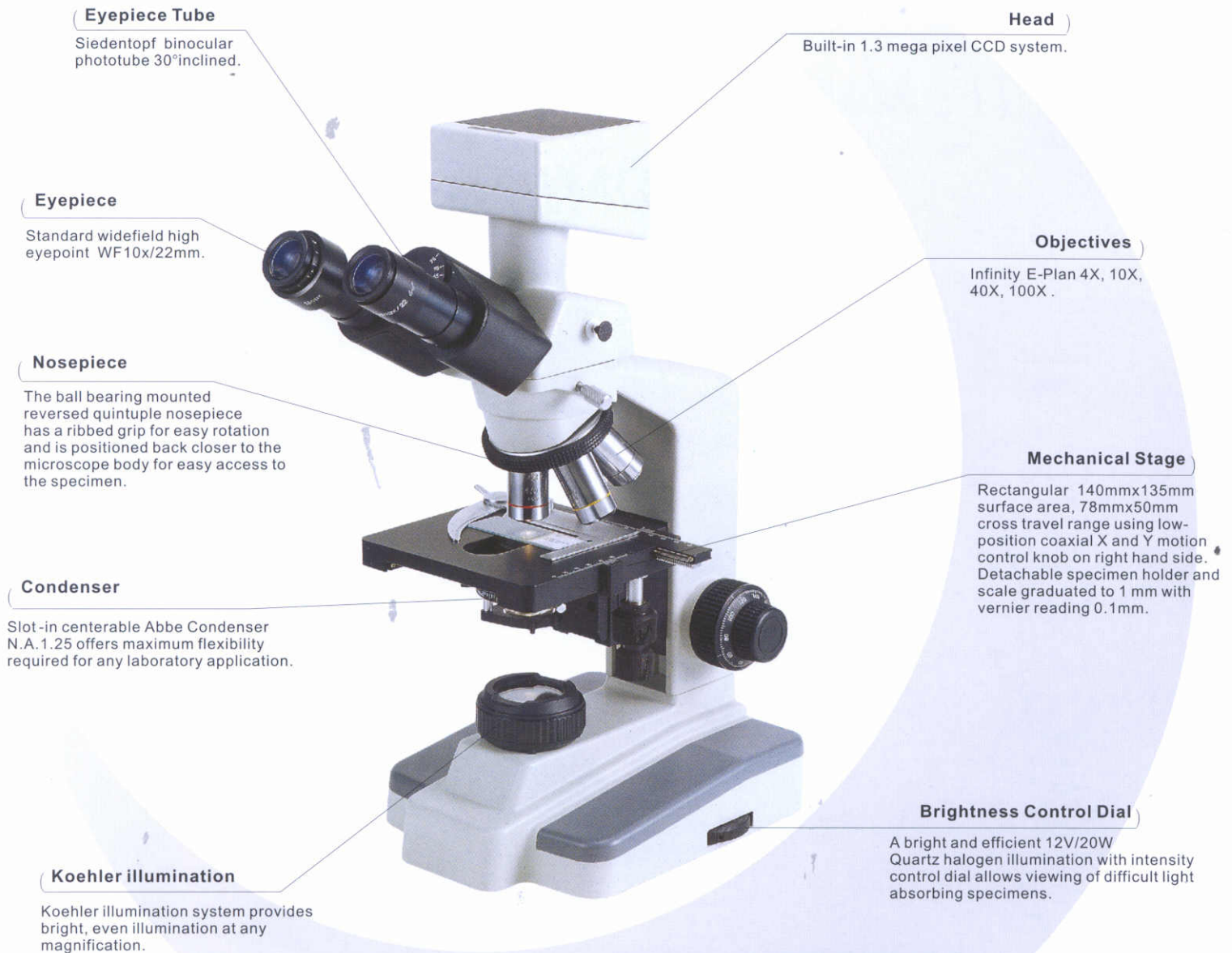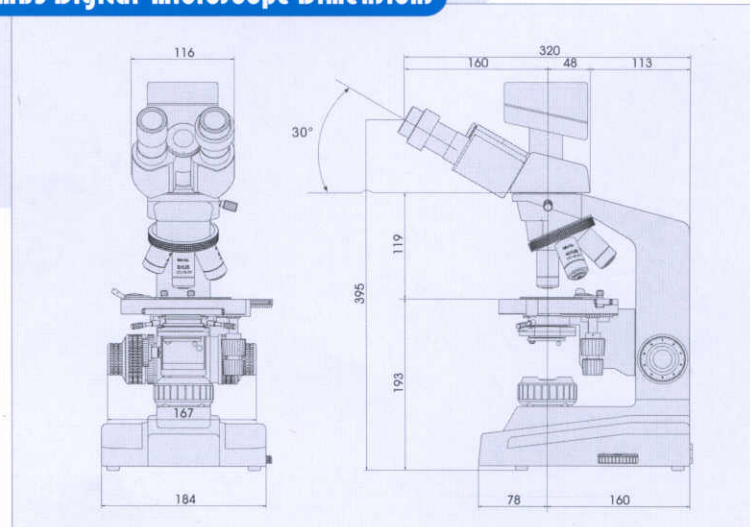
DMB5 DIGITAL MICROSCOPE

DMB5

An All-in-one system with 1.3 mega pixel resolution

Digital portion made by Motic (Canada).

DM B5 , DIGITAL MICROSCOPE

Color Corrected Infinity Optical System

Eyepiece Tube

Siedentopf binocular phototube 30°inclined.

Head

Built-in 1.3 mega pixel CCD system.

Eyepiece

Standard widefield high eyepoint WF10x/22mm.

Objectives

Infinity E-Plan 4X, 10X, 40X, 100X .

Nosepiece

The ball bearing mounted reversed quintuple nosepiece has a ribbed grip for easy rotation and is positioned back closer to the microscope body for easy access to the specimen.

Mechanical Stage

Rectangular 140mmx135mm surface area, 78mmx50mm cross travel range using low-position coaxial X and Y motion control knob on right hand side. Detachable specimen holder and scale graduated to 1 mm with vernier reading 0.1mm.

Condenser

Slot-in centerable Abbe Condenser N.A.1.25 offers maximum flexibility required for any laboratory application.

Brightness Control Dial

A bright and efficient 12V/20W Quartz halogen illumination with intensity control dial allows viewing of difficult light absorbing specimens.

Koehler illumination

Koehler illumination system provides bright, even illumination at any magnification.

DMB5 Digital Microscope Dimensions

An All-in-one system with 1.3 mega pixel resolution
Digital portion made by Motic (Canada).

Motic® *DIGITAL MICROSCOPE*

DMB5 realizes our **infinity color corrected optical system**, equipped with ultra high 1.3 mega pixel resolution imager, signals are transmitted at high speed through IEEE1394 file-wire system, operated with our user friendly and powerful application software ,

- Motic Images 1.2
- Motic Images Advanced 3.0 [standard]
- MoticPro 5.0
- MoticMed 6.0

With special features:
- Super wide field 22mm eyepiece.
- Siedentopf binocular head .
- Centerable Abbe condenser.
- Kohler illumination.
- Optional accessories like Darkfield Condenser and Polarizing equipment are available.
- This digital microscope can also be used as a standard optical microscope.

- **Darkfield** kit SG030202
  When darkfield condenser is applied, observation may be viewed through related 4x-40x objectives

- **Koehler** illumination SG040012
  With iris diaphragm fitting one's need for adjustment requirement.

Optional Accessories

- **Polarizing set** SP080014
  This attachment consists of a polarizing filter attached under the condenser and an analyzer placed under the eyepiece tube. A graduated rotating slider holder to attach to the mechanical stage.

Phase Contrast Attachment

Spare parts	Order No.
5 position turret condenser	SG030314
Centering telescope	SG069993
10x objective infinity phase plan	SG01S02288
20x objective infinity phase plan	SG01S03288
40x objective infinity phase plan	SG01S04288
100x Oil objective infinity phase plan	SG01S06288

Eyepiece

Spare parts	Order No.
WF10x/22mm	SG02S0124
WFx/22mm (with diopter adjustable)	SG02S0123

Objectives Infinity E-plan

Spare parts	Order No.
4x objective infinity E-plan	SG01S01272
10x objective infinity E-plan	SG01S02272
40x objective infinity E-plan	SG01S04272
100x Oil objective infinity E-plan	SG01S06272

Objectives Infinity plan

Spare parts	Order No.
4x objective infinity plan	SG01S01286
10x objective infinity plan	SG01S02286
20x objective infinity plan	SG01S03286
40x objective infinity plan	SG01S04286
100x Oil objective infinity plan	SG01S06286

3 position sliding phase contrast condenser kit SG030315

Individual phase contrast condensers

Spare parts	Order No.
10x objective infinity phase plan	SG069990
20x objective infinity phase plan	SG069991
40x objective infinity phase plan	SG069992
100x Oil objective infinity phase plan	SG069996

Other accessories

Spare parts	Order No.	Spare parts	Order No.
Blue filter (Diameter 45 mm)	SG060727	Eyepieces Rubber cup 1 pair	SB150001
Yellow filter (Diameter 45mm)	SG060728	Halogen lamp bulb 12V 20W	SE060098
Green filter (Diameter 45 mm)	SG060726	Dust cover	SB110005
Frosted glass (Diameter 45 mm)	SG060729		

Specifications

Imaging Chip

Type	1.3 Mega pixel CMOS sensor
Resolution	1280 x 1024 active pixels
Image Array Size	12.3mm,diagonal
Pixel Pitch	$7.5\mu m \times 7.5\mu m$
Max.Frame Rate	20 fps at 8-bit 640 x 480
(16MHz)	9.3 fps at 8-bit 1280 x 1024
	1500 fps at 8-bit 1280 x 8
Color Mosaic	RGB Bayer with microlenses
Shutter	Electronic rolling
Dynamic Range	66dB S/N ratio
Sensitivity	3.8 volt/Lux-set
Gamma	Software programmable

Electrical

Voltage	8V-30V DC
Power	3 W typ.(250mA at 12V, supplied by 1394 cable)

Physical

Operating Temp	+5° C to +60° C
Lens mount	C-mount adapter (lens not supplied)
IR Filter	Integrated into C-mount adapter
Weight	80g (without lens)

Interface

Operating System	Windows® 98 SE/ ME /2000 /NT4.0® Mac OS9®
Data Fomat	8-bit or 10-bit,uncompressed
Interface Type	2 IEEE-1394a, 6-pin ports (400 Mbits/s)
Max.Data Rate	24 M pixels / sec (8-bit pixels)
	12 M pixels / sec (10-bit pixels)

Software Command and Control

Color Gain	Independent Red, Green, Blue controls
x2, x4 Decimation	Increased frame rates through sub-sampling
Exposure	Up to 400 ms exposures in still mode
Flip and Mirror Modes	Change image orientation dynamically
Gamma	User configurable
Digital Pan,Tilt, Zoom	Flexible sub-windowing capabilities
8 or 10 bit pixels	Suitable for high-definition images
Ext Trigger Input	Up to 7 fps at 1280 x 1024
External Flash	-2 s/+400 ms programmable delay with respect to start of exposure in 1 ms increments
12C serial bus	Communicate with other vision system elements
External Shutter	TTL active high shutter control