

kena™ IS HERE!

kena™ is a new portable digital microscope for the classroom or the field. It has a USB connection, so you can magnify, capture or modify your images. With a few moving parts and low energy usage, it is an ideal green, 21st century classroom solution.

Design
Patented

Magnification
20x, 40x, 100x

Light Source
Ken-A-Vision Cool Lighting (LED)
Battery-operated Stage Light

Connection
Powered by pre-attached USB
2.0 Cable

Software
Included
Plug-N-Play
PC, Mac & LINUX



The ergonomic shape fits snugly in your hand or onto the sleek, sturdy base. **kena** has 2x, 4x and 10x objectives and cool, bright LED lighting on top or bottom for viewing of objects or slides.



ken-a-vision®
KNOWLEDGE THROUGH VISION

(816) 353-4787 Fax (816) 358-5072

solutions@ken-a-vision.com

www.ken-a-vision.com

kena

T-1050



Kena, a new digital microscope with a unique detachable head, is ideal for teachers and students, in the classroom or in the field. It has a USB connection, so you can magnify, capture, or modify images or video. Its software allows for easy to use manipulation, amalgamation, annotation, and integration into your favorite Windows or Mac programs. The removable camera/magnification head has an ergonomic shape to fit snugly in your hand or onto the sleek, sturdy metal base. Kena has 20X, 40X and 100X magnifications, USB powered LED lighting on top, and battery powered LED lighting on bottom for viewing of specimens or slides. The unique stage pad eliminates the need for stage clips.

Features and Benefits

Cord Management Handle System	Tidy, protects cord
4 AA Alkaline Batteries	Practical
2X, 4X, 10X Objectives	Standard magnification ranges
Removable camera/magnification head	Allows you to work in a macro environment
LED illumination	Ken-A-Vision Cool Lighting
Sleek size	Packable, Easy-to-store
Ergonomic shape	Comfortable, easy grip
Sturdy metal base	Durable / protective holder
Unique stage pad	Anti-slip, no stage clips (to break or hassle with)
USB 2.0	Easy to use, low service cost
Minimal moving and spare parts	Student- proof (less chance to break or lose parts)

Detailed Specifications (March 2009)

Items	Specification	Remark/spec/unit
Size	7.0"x6.0"x8.0"/11.5" (min/max) 17.8cmx15.2cmx20.3cm/29.2cm (min/max)	
Weight	3.2 lbs; 1.5kg	
Optical format	1/4 inch	4:3
Resolution	640(H) x 480(V)	VGA
Sensor Dimension	5.345 mm x 5.265 mm	
Pixel size	6.0 um x 6.0 um	
Data output	8 Bit (uncompressed video)	Bit rate control
Data output format	GRB/YcbCr 4:2:2, YUV, RGB565/555/444	CPU
Automatic image functions:	Automatic Exposure Control	AEC
	Automatic Gain Control	AGC
	Automatic White Balance	AWB
	Automatic Band Filter	ABF
	Automatic Black Level Calibration	ABLC
	Automatic Noise Removal	ANR
	Lens shading correction	LSC
	Defect pixel compensation	DPC
	Edge enhancement	EE

kena

T-1050



Image Quality Controls	Color saturation	fixed, Auto
	Hue	fixed, Auto
	Gamma control	fixed, Auto
	sharpness	fixed, Auto
	Anti-blooming	fixed, Auto
USB device controller	Compliant USB 1.1 & 2.0	CPU
USB cable	Black with grey cable clip	USB 2.0 cable, 6.0 feet
Customizable	Vendor ID & Product ID	Same on both string (CPU)
Image transfer rate	30 @ VGA	640 x 480
S/N ratio	60 dB	
Light sensitivity	3.0 V	Lux/second
Dynamic range	60 dB	
Scan Mode	Progressive	
Image Compression	JPEG	
Snap shot button	Located on top of camera body	
Camera head	Detachable	Turn focusing knob upward & pull
Focusing method	Slide belt movement type	
Objective lens	2x, 4x, 10x	Click Stop Rotation
	Mounted in camera housing	See thru clear cover
Total magnification power	at 2x objective lens	20x
	at 4x objective lens	40x
	at 10x objective lens	100x
Working distance	Up to 80 mm from the bottom stage surface.	About 1 & 1/4 turn to reach 80 mm point
Focal distances	at 2x objective lens	about 18.0 mm
	at 4x objective lens	about 21.0 mm
	at 10x objective lens	about 5.0 mm
Camera housing	Grey part length only	163.0 mm
	Grey part diameter (longest side)	70.0 mm
	Clear cover length	20.0 mm
	Clear cover diameter	48.0 mm
	Focusing rail dimension	107.0 mm x 28.0 mm
Scope body dimension	153.0 (W) x 158.0 (H) x 190.0 (D)	in millimeters
	Knob end to end distance	166.0 mm
Lighting	Bottom light (One cool white LED)	uses 4-AA alkaline batteries
	Upper light (Six cool white LEDs)	uses DC 5.0 V from USB port
LED light on/off switch	Bottom light	Right side on stage
	Upper light	underneath USB cable on camera body
Battery compartment	Left side of the base	for bottom stage light
	Battery polarity indicator	marked inside of battery door/bottom
Red handle	Use organize USB cable with cable clip in the cable	
Current consumption	200 mA max	Camera part only
Operating temperature	-20C to 50C	
Rubber coating	Camera body and focusing knobs	
Software to be used	kena viewer	Proprietary Customizable
Certifications	RoHS, CE	
Warranty	1 Year	