## Specifications VisionTek® Live Digital Microscope

### Intended Specimen | Observable Specimen | Glass slide with cover glass/film
--- | --- | ---

### Size of Glass Slide
- W x L: 25 x 75 mm or 26 x 76 mm
- D (thickness): 1.0 mm standard ± 0.2 mm

### Size of Cover Glass
- Coverslip thickness: 100-170 µm,
- Typical coverslip material:
  - D263® M glass (microscope cover glass)
  - Cellulose Tri-Acetate film (microscope cover film)

### Mounting Media
- Usually the slides are prepared using the following mounting media:
  - Sakura film coverslip, Sakura glass mounting media, Eukitt

### Microscope Frame
- Observable area
  - Label: 24 x 20 mm
  - Specimen: 24 x 50 mm
  - Specimen need to be covered with cover glass or coverslip

### Illuminator
- Bright field Koehler LED Illumination

### Objective Lenses
- Carl Zeiss EC Plan-Neofluar 2.5x/0.075
- Carl Zeiss EC Plan-Neofluar 10x/0.3
- Carl Zeiss EC Plan-Neofluar 20x/0.5

### Motorized Stage
- Motorized XY stage with automatic control
- Automated lens changer

### Focusing
- Motorized automatic and manually focus

### Digital Camera
- CCD Camera
  - 4.1M pixel (2336 x 1752 px; Pixel size 5.5 µm);
  - high sensitivity and high resolution camera

### Live image display
- 16 frames/sec.

### Image file format
- Scan: Proprietary
- Open format under development
- Snap shot: BMP, JPEG, TIFF

### Image Correction
- Calibrated:
  - Color Correction
  - Shading correction
  - White balance
  - Distortion correction
- User settable:
  - Brightness
  - Contrast
  - Sharpness

### Scan Area
- W x L: 24 x 50 mm

### Scan
- Resolution
  - 2.5x: 2.20 µm/ pixel
  - 10x: 0.55 µm/ pixel
  - 20x: 0.275µm/ pixel

### Scan Speed (15mm x 15mm)
- 175 sec using high resolution 20x (0.275µm/px)
<table>
<thead>
<tr>
<th><strong>System Control</strong></th>
<th><strong>Computer</strong></th>
<th>DELL Minitower with Operating system windows 7 x 64 bit; Ultimate SP1 English; CPU Core i7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Network Interface</strong></td>
<td>100/1000 Mbit/s Ethernet</td>
<td></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>Min. 8 GB RAM</td>
<td></td>
</tr>
</tbody>
</table>
| **Hard Disc Drive** | Primary: min. 120Gb  
Secondary: min. 1,0Tb |
| **Display** | NEC Multisync PA241W |
| **VisionTek®** | **Application Software** | Fully automated User Interface  
Live Mode: automated and manual autofocus  
zooming / panning / scrolling  
zooming while scanning  
annotations and measurements  
digital gallery  
live slide gallery  
Multi image display: comparison of views on slide, different slides, digital slides  
Scanner Mode: partial slide scanning  
automated whole slide scans  
z-stacking (multilayer)  
automated tissue detection  
Import and export functions  
Multi language support  
Online help functions |
| **Environment** | **Weight** | 35 kg |
| **Dimensions (h x w x d)** | 60 x 50 x 50 cm |
| **Operating Environment** | Temperature Range: +15°C to +25°C  
Relative Humidity: 10% to 75%, non-condensing |
| **Storage Environment** | Temperature Range: +5°C to +40°C  
Relative Humidity: 5% to 85%, non-condensing |
| **Power** | 85 to 264VAC, 47-63Hz, single-phase  
Power cord connector: IEC/EN 60320-1/C14 |
| **Power Consumption** | Max. 460 W |
| **Noise Level** | <50 dB (1m distance) |
| **Heat Rating** | VisionTek®-System:170 BTU/h  
Dell PC: 340 BTY/h  
Monitor (NEC PA241W): 201 BTU/h |
| **Europe** | IEC 61010-1 (2nd Edition)  
IEC 61010-2-101  
IEC 61326 - 1 |
| **Safety Standards** | **Regulatory Information** | CE Certified in compliance with the requirements of EMC Directive, LV Directive in Europe IEC 61326-1:2006  
This device is tested to comply with FCC Rules Part 15 |