# ZEISS LSM510 META

## INSTRUMENT SPECIFICATION SHEET

<table>
<thead>
<tr>
<th>Location</th>
<th>E201, Medical building, Department of Anatomy &amp; Neuroscience University of Melbourne</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand</td>
<td>Upright Axio Imager: Z1</td>
</tr>
</tbody>
</table>

### Illumination

<table>
<thead>
<tr>
<th></th>
<th>Transmitted</th>
<th>Fluorescence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hal 100 (Halogen 12V 100W)</td>
<td>HBO 100 (Mercury short-arc 100W)</td>
</tr>
</tbody>
</table>

### Filters

<table>
<thead>
<tr>
<th>Name</th>
<th>Excitation</th>
<th>Dichroic</th>
<th>Emission</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>00 PI</td>
<td>BP 530-585</td>
<td>FT 600</td>
<td>LP 615</td>
<td>488000-0000</td>
</tr>
<tr>
<td>10 AF488</td>
<td>BP 450-490</td>
<td>FT 510</td>
<td>BP 515-565</td>
<td>488010-0000</td>
</tr>
<tr>
<td>49 DAPI</td>
<td>G 365</td>
<td>FT 395</td>
<td>BP 445/50</td>
<td>488049-0000</td>
</tr>
</tbody>
</table>

### Lasers (hazard:3B)

<table>
<thead>
<tr>
<th>Type</th>
<th>Wavelength</th>
<th>Maximum output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diode</td>
<td>405nm</td>
<td>30mW</td>
</tr>
<tr>
<td>Argon</td>
<td>458, 477, 488, 514nm</td>
<td>30mW</td>
</tr>
<tr>
<td>DPSS</td>
<td>561nm</td>
<td>15mW</td>
</tr>
<tr>
<td>HeNe</td>
<td>633nm</td>
<td>5mW</td>
</tr>
</tbody>
</table>

### Stage control

Motorised stage control with z-stack, tile scan and point visiting capability

### Objectives

<table>
<thead>
<tr>
<th>Objective Specification</th>
<th>Magnification</th>
<th>Type</th>
<th>NA</th>
<th>Working distance</th>
<th>Coverslip Thickness</th>
<th>Resolution at 550nm (Glycerol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLUAR</td>
<td>5x Air</td>
<td>0.25</td>
<td>12.5 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:880 axial: 2095</td>
<td></td>
</tr>
<tr>
<td>Plan-APOCHROMAT</td>
<td>10x Air</td>
<td>0.4</td>
<td>2 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:489 axial: 1164</td>
<td></td>
</tr>
<tr>
<td>EC Plan-NEOFLUAR</td>
<td>20x Air</td>
<td>0.5</td>
<td>2 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:440 axial: 1048</td>
<td></td>
</tr>
<tr>
<td>EC Plan-NEOFLUAR</td>
<td>40x Oil</td>
<td>1.3</td>
<td>0.21 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:169 axial: 403</td>
<td></td>
</tr>
<tr>
<td>Plan-APOCHROMAT</td>
<td>63x Oil</td>
<td>1.4</td>
<td>0.19 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:157 axial: 374</td>
<td></td>
</tr>
<tr>
<td>Plan-APOCHROMAT</td>
<td>100x Oil</td>
<td>1.4</td>
<td>0.17 mm</td>
<td>0.17 (#1.5)</td>
<td>lateral:157 axial: 374</td>
<td></td>
</tr>
</tbody>
</table>

### Detectors

<table>
<thead>
<tr>
<th>#</th>
<th>Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>PMT</td>
<td>Fluorescence detectors</td>
</tr>
<tr>
<td>1</td>
<td>Meta detector</td>
<td>Spectral fluorescence detector</td>
</tr>
<tr>
<td>1</td>
<td>T-PMT</td>
<td>Transmitted light</td>
</tr>
</tbody>
</table>

### Software

Zen 2009

### Holder

Slides only

### Applications

Fixed sample only

### File Saving

USB or via network (Anatomy & Neuroscience users only)

### Extra features

NA