MORE THAN JUST BASIC SEMEN ANALYSIS
Microptic are the innovators of the world’s most advanced CASA (Computer Aided Semen Analysis) system. With dynamic and highly qualified staff, we continue to develop our products in collaboration with the world’s leading research centres and laboratories.
SCA®, THE MOST ADVANCED AND INTEGRATED MODULAR CASA

Automatic measuring system for the analysis of semen samples, following WHO¹ criteria or others.

WHY USE A CASA SYSTEM?

RELIABLE AND DEMONSTRABLE DIAGNOSTICS
Many scientific papers have revealed the homogeneous results obtained with CASA², in contrast to the often unreliable outcome from conventional analysis³.

IMPROVE THE QUALITY OF YOUR LABORATORY PROCEDURES
SCA® will assist in the implementation of the objective analysis and quality controls in your laboratory, in addition it produces all of the information needed for the norm ISO 15189:2013 accreditation.

STANDARDIZATION AND TRACEABILITY
The SCA® greatly improves the ability of the laboratory to compete through the consistency of the analysis by recording image sequences and results. Measurement errors due to human factors are minimized in the analysis of human sperm.

WIDELY VALIDATED
Various studies have shown that the SCA® provides reliable, linear and accurate results with less variability than manual methods, giving higher predictive values when diagnosing fertility problems⁴.

¹ (WHO laboratory manual for the examination and processing of human semen Fifth edition 2010)
³ (Mukhopadhyay D, Varghese AC, Nandi P, Banerjee SK, Bhattacharyya AK, Andrologia, 2010)
⁴ (Dearing C G, Kilburn S, Lindsay K. S., Human Fertility, 2013)
We have numerous SCA® editions with optional modules to help you to find the optimum configuration for your laboratory.
THE MOST COMPLETE CASA SYSTEM

SCA® EDITIONS

Several editions with options adapted to give users a choice that will suite their needs:

**Human**
- Full version, with all the features included for human andrology and IVF labs, sperm banks, fertility clinics, hospitals, etc.

**Research**
- Full version to analyse human and animal sperm focused to research centres.

ADDITIONAL MODULES

Enable to complete your SCA® CASA system:

**SCA® dataShare**
- It enables the internal SCA® database sharing and a bidirectional connection with any LIS system.

**SCA® Stage Controller**
- Fully automation using motorized stage.

**SCA® Manual counter**
- Manual counter of any biological sample.

COMPLEMENTARY SYSTEMS

Unitary systems that permit to capture, view or edit SCA® files:

**SCA® Capture**
- Image capture software to use in connection with a main SCA® station.

**SCA® Editor**
- Software that allows the opening of SCA® sessions enabling to edit or reanalyze.

**SCA® Viewer**
- Free software that allows to display SCA® analysis in any computer.
SCA® EVOLUTION: A STATE-OF-THE-ART CASA

Since its launch in 1997, the SCA® sperm analyser has been in continuous development, improving with each version the detection and analysis algorithms. Combined with the latest state-of-the-art technology, SCA® becomes the ultimate CASA research tool.

VITALITY IN BRIGHTFIELD
We developed BrightVit, a new kit to stain in one step to assess quickly the vitality in brightfield (possible to see the HOS). SCA® Vitality can automatically analyse in brightfield or fluorescence.

SPERM FUNCTIONAL TEST
Automatic analysis of hyperactive and mucus penetration, information about sperms capacity to fertilize the egg.

DIAGNOSTIC AND TREATMENT
Automatically provides a diagnosis and recommends the best assisted reproduction treatment to follow.

CUSTOMIZABLE DYNAMIC TABLES
Enable the operator to amalgamate any of the database results into subgroups and create customised statistics.

ADAPTED TO THE NEW TECHNOLOGIES
Working with touch screens, multi-screens, leap motion¹ and portable devices.

ACROSOME REACTION ASSAY
Automatic analysis of intact and acrosome reacted sperm with FluoAcro kit.

ADVANCED ANALYSIS
SCA® offers several innovations in automatic analysis such as: an intelligent filter for sperm detection; fluorescence analysis for sperm concentration, motility and DNA fragmentation; very low concentration samples analysis; and vacuoles and tails detection in morphology.

AUTOMATION
With a motorized stage, the analysis process is fully automatic enabling the examination of 4 slides, without user intervention.

RESEARCH EDITION
Analysis of several species, export images, videos and measurement data. Designed for centres involved in research that requires a flexible and exhaustive system.

NEW INTERFACE
Fully customizable.

¹www.leapmotion.com
OUR OBJECTIVE: WARRANTY AND TRUST IN THE DIAGNOSTICS

CUSTOMIZED REPORTS SERVICE
More than 40 different reports, including Levy-Jennings report for quality control.

ANALYSIS RESULTS ON-LINE
Patients can have access to their results and analysis videos on: www.semenanalysis.net

mySCA
Virtual site for customers with unlimited space to upload sessions, reports and videos. Also permits users to access webinars, tutorials and on-line teaching courses as well as perform an External Quality Control (EQA).

TRAINING IN YOUR LABORATORY
Installation, training and accreditation by specialist.

IMAGES AND GRAPHICS
The user can select the graphics/images that will appear in the printed report.

RESULTS VALIDATION
A specialist can validate all the assessments, automatically send the results to the central database (e.g.: HL7), and print the custom reports.

LABORATORY INFORMATION SYSTEM (LIS) CONNECTIVITY
SCA® is ready to connect with existing databases.

SUPPORT
Technical advice and service, giving the latest program version.
### SCA® MODULES AND SYSTEMS:

#### MAIN MODULES

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCA® Motility and concentration</td>
<td>Analysis of the motility, concentration and kinematic parameters</td>
</tr>
<tr>
<td>SCA® Morphology</td>
<td>Analysis of the morphology and morphometry in stained sperm samples</td>
</tr>
<tr>
<td>SCA® DNA Fragmentation</td>
<td>Analysis of the DNA fragmentation with the chromatine dispersion test</td>
</tr>
<tr>
<td>SCA® Vitality</td>
<td>Analysis of the vitality under brightfield or fluorescence</td>
</tr>
<tr>
<td>SCA® Acrosome reaction</td>
<td>Analysis of intact and acrosome reacted under fluorescence</td>
</tr>
<tr>
<td>SCA® Sample Management</td>
<td>Management of the database and reports generator</td>
</tr>
</tbody>
</table>

#### ADDITIONAL MODULES

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCA® DataShare</td>
<td>It enables the internal SCA® database sharing and the connection with any LIS system</td>
</tr>
<tr>
<td>SCA® Stage Controller</td>
<td>Fully automation using motorized stage</td>
</tr>
<tr>
<td>SCA® Manual Counter</td>
<td>Manual counter of any biological sample</td>
</tr>
</tbody>
</table>

#### COMPLEMENTARY SYSTEMS (To be used in combination with a main analysis system)

- SCA® Capture: Unitary module for image capture
- SCA® Editor: Module for analysis modification
- SCA® Viewer: Free software for image visualization

#### MINIMUM REQUIREMENTS:

<table>
<thead>
<tr>
<th></th>
<th>SCA® Motility and Concentration</th>
<th>SCA® Morphology</th>
<th>SCA® DNA Fragmentation</th>
<th>SCA® Vitality</th>
<th>SCA® Acrosome reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPUTER</strong></td>
<td>Desktop or laptop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operating system Windows 10 (32 or 64 bits);</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Processor: Intel Core i5 or superior;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RAM: 4 GB or superior; USB 3.0 port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CAMERA</strong></td>
<td>Basler Ace acA1300-200uc</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MICROSCOPE</strong></td>
<td>Nikon, Olympus, Zeiss or Leica;</td>
<td>Trinocular C-mount 1x;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Turret condenser and centering telescope</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OBSERVATION METHOD</strong></td>
<td>Positive phase contrast</td>
<td>Fluorescence</td>
<td>Brightfield</td>
<td>Brightfield</td>
<td>Fluorescence</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brightfield</td>
<td>Fluorescence</td>
<td></td>
</tr>
<tr>
<td><strong>OBJECTIVE</strong></td>
<td>10x Ph+</td>
<td>60x / 100x oil</td>
<td>10x</td>
<td>20x</td>
<td>40x Plan Fluor</td>
</tr>
<tr>
<td><strong>FILTERS</strong></td>
<td>Green</td>
<td>Blue</td>
<td>Green</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long bandpass (EX 330-380; EM 420; DM 400)</td>
<td>Blue</td>
<td>Green</td>
<td>-</td>
<td>Long bandpass (EX 330-380; EM 420; DM 400)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DISPOSABLES, KITS, STAININGS</strong></td>
<td>Disposable counting chambers or Makler</td>
<td>Sperm Stain, SpermBlue, Diff-Quik, Prestained slides GoldCyto-SB, Papanicolau, Shorr</td>
<td>Chromatin dispersion test kits (SCD)</td>
<td>BrightVit</td>
<td>FluoVit</td>
</tr>
<tr>
<td></td>
<td>FluoCount</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**DISTRIBUTOR:**

[Company Logo]  
Av. Josep Tarradellas, 8, 1º 6ª · 08029 · Barcelona (Spain) · T. +34 93 419 29 10 · F. +34 93 419 94 26  
www.micropticsl.com · micropticsl@micropticsl.com

SCA-HUM-EN-1805