



AndroScope

CASA System To Go



Small system. Big performance. Anywhere.



Powerful offline performance

AndroScope can be connected via USB 3.0 to any Windows 10 or newer PC, laptop, or tablet for offline use with the installed software. This setup ensures stable, high-performance analysis within a familiar desktop environment. The direct USB connection provides reliable data transfer and continuous operation, making it ideal for laboratory settings where a fixed workstation is preferred.



System requirements laptop:

- Operating system: Windows 10 or 11 | 64-bit version
- Single-core processor with 1 GHz | 1 GB RAM | 128 GB SSD
- USB port for AndroScope: USB A or C 3.0 / 3.1 / 3.2
- 30-40 watt power supply
- Adobe Reader DC (recommended)

The software is available in 7 languages:



True mobility with App and WiFi station

Run real-time CASA analysis straight from your smartphone – no PC or tablet needed. Download the app free from the Google Play Store or Apple App Store and connect instantly via the dedicated WiFi station for smooth live video streaming. With seamless wireless support for Android and iOS devices (Android 13+, iOS 15+, minimum 4 GB RAM), you get fast, flexible analysis wherever your work takes you.

Compatible with AndroScope v1.4+



Scan to
download



Countless application possibilities for your daily practice

Sperm motility and concentration of **various species** can be analyzed within seconds. Standard **profiles for bulls, boars, stallions, dogs, cats, small ruminants, and poultry** are stored by default, further profiles can be added in collaboration with Minitube. You can either analyze **fresh, chilled, or frozen-thawed** semen.

Monitor semen quality for successful breeding

AndroScope is a compact mobile CASA system that is based on **AndroVision®**. It allows to analyze semen samples anywhere and to monitor semen **motility** and **concentration** at any point in the production, transport, and insemination process.

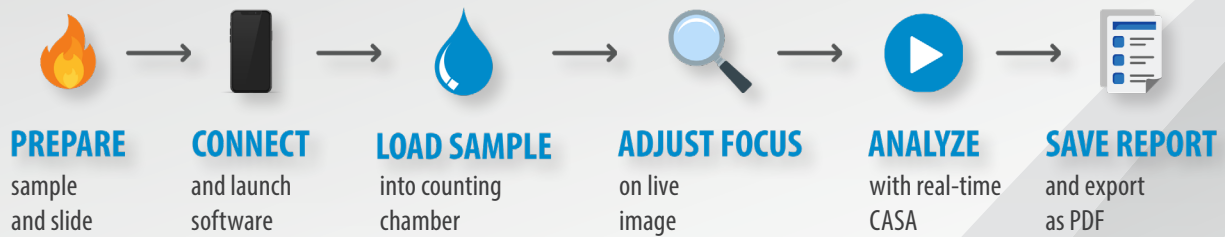
Sophisticated technology in the smallest of spaces

AndroScope is equipped with a professional **high-speed camera** and a **robust focus adjustment** for precise semen analysis. The **heating unit** in the analysis area of the mobile CASA reaches the optimal temperature for semen analysis within a few seconds, so that semen analysis is performed at optimal temperature conditions.

Maximum flexibility, minimum training

The analysis unit supports disposable Minitube counting chambers and other chambers with identical dimensions (e.g., Leja chambers or standard microscope slides with cover glass*). Quick setup, easy handling, and minimal training ensure accurate results.

Semen analysis with AndroScope in 6 easy steps



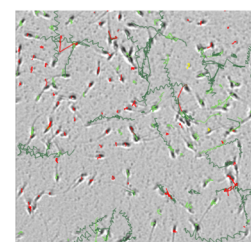
Concentration and motility at a glance

AndroScope provides reliable, objective analysis results without the services of a stationary semen lab. You can follow the analysis **live on the screen** and generate a **PDF report** with the most important parameters clearly mapped. Analysis reports can be saved and shared with others.

Precise semen analysis: verified accuracy

AndroScope analyses provide **accurate data on sperm motility and concentration**, as verified in trials. Figure 1 shows the linear correlation of total and progressive motility measured with AndroVision® and AndroScope. An R^2 (coefficient of determination) of 1.0 means that there is a complete correlation between the methods. For the comparison of AndroVision® and AndroScope, $R^2=0.94$ for total motility and $R^2=0.97$ for progressive motility (figure 1) indicate **high correlation** between the measurement methods. This also applies to the measured sperm concentration, for which an R^2 of 0.93 was obtained (figure 2).

Motility & Concentration



Sample analysis

Date of analysis:	27.03.2023
Total number of sperm analyzed:	1155
Number of fields:	1
Dilution ratio:	1 + 4
Concentration:	[10 ⁶ /ml] 888.31
Total motility:	[%] 62.65
Progressive motility:	[%] 61.58
Fast motility:	[%] 28.51
Slow motility:	[%] 32.53
Circle motility:	[%] 0.54
Local motility:	[%] 1.07
Immotile:	[%] 37.35

Average kinematic	VCL	VSL	VAP	DCL	DSL	DAP	ALH	BCF	HAC	LIN	STR
	[μm/s]	[μm/s]	[μm/s]	[μm]	[μm]	[μm]	[μm]	[Hz]	[rad]	[VSL/VCL]	[VSL/VAP]
Total motility	156.35	44.88	63.83	44.51	11.44	17.45	1.32	17.84	0.39	0.26	0.61
Progressive motility	123.77	55.16	62.24	36.84	13.54	16.82	0.97	17.67	0.28	0.23	0.31
Fast motility	157.95	45.39	64.52	44.91	11.56	17.62	1.34	18.00	0.39	0.26	0.61
Slow motility	124.46	55.47	62.59	37.09	13.63	16.93	0.97	17.81	0.28	0.23	0.31
Circle motility	216.97	68.21	93.00	55.84	16.05	23.16	1.78	24.08	0.47	0.30	0.67
Local motility	75.98	47.38	44.78	33.40	13.62	15.56	0.64	12.14	0.20	0.18	0.25
Immotile	80.34	16.03	27.86	30.27	5.48	10.12	0.77	10.10	0.29	0.20	0.53
Average kinematic	21.63	14.44	14.99	12.02	4.61	5.71	0.23	6.00	0.19	0.16	0.24
Circle motility	295.28	117.45	150.26	113.88	44.03	56.95	2.11	41.87	0.65	0.41	0.78
Local motility	218.53	156.54	116.36	112.50	55.30	36.70	2.86	59.99	0.65	0.52	0.86
Immotile	34.11	5.59	10.97	14.46	2.41	4.69	0.36	5.66	0.18	0.17	0.52
	5.11	2.12	3.49	3.20	1.04	1.75	0.05	1.59	0.15	0.08	0.15

PDF analysis report: all important parameters at a glance



Motility AndroVision® - AndroScope

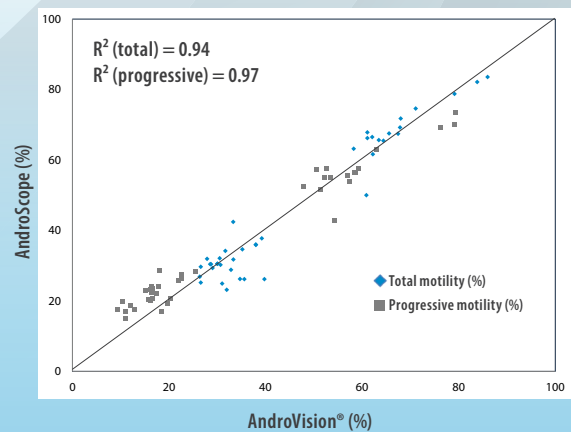


Figure 1: Linear regression to evaluate the accordance of total and progressive motility analyzed by AndroVision® and AndroScope

Sperm concentration AndroVision® - AndroScope

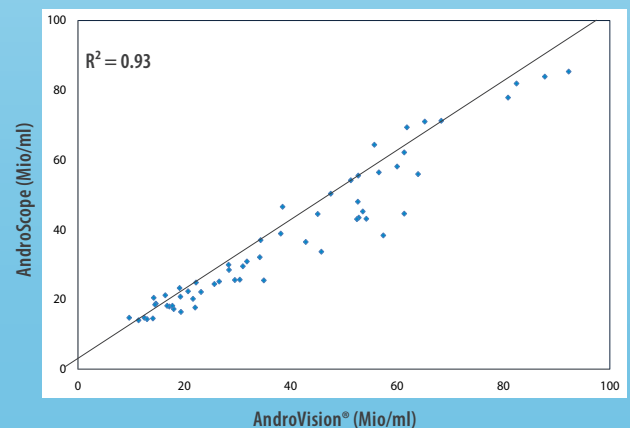


Figure 2: Linear regression to evaluate the accordance of sperm concentration analyzed by AndroVision® and AndroScope



minitube



AndroScope Modular System

AndroScope [1]

12500/3000

Recommended for sample preparation:

*Mobile warming unit, for 6 test tubes and 1 slide [2]

12057/6000

The mobile warming unit can be ordered optionally. It finds place in the AndroScope case, so that all equipment is compactly packed together.

For mobile operation on smartphone:

AndroScope WiFi station [3]

12500/3010

App [AndroScope mobile](#) available for free on the Google Play Store or Apple AppStore.

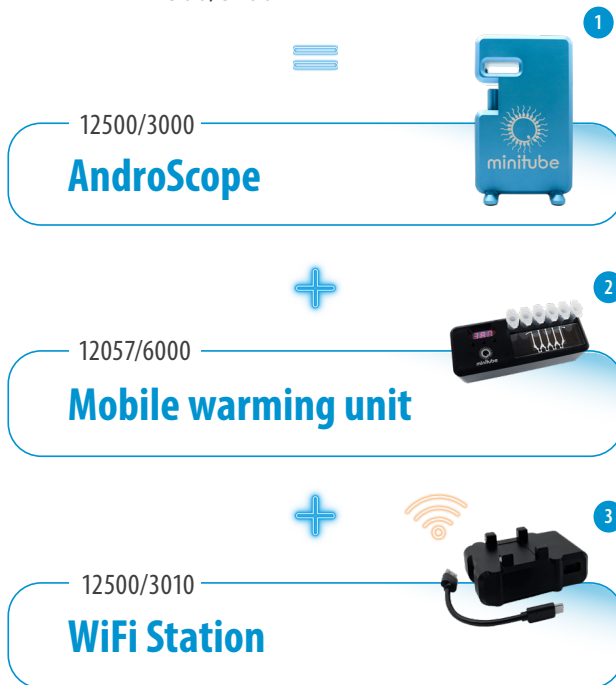
Scope of delivery

The following accessories are supplied with AndroScope and the AndroScope Package

- 1x Transport case
- 1x USB-memory card with software
- 1x Cable for connecting AndroScope to Windows® device
- 25x Disposable counting chambers Minitube, 20 µm, 12050/0220 [4]
- 25x Test tubes 2 ml with cap, 14602/0904 [5]
- 100x Disposable capillary tubes for filling the counting chamber, 15404/0100 [6]
- 10x Micro fiber rods, 12510/0106 [7]



AndroScope Package
12500/3100



True mobility without compromise:
Bring CASA analysis wherever you go with AndroScope.