



CASA II Remote Capture Software

For CEROS II Animal Applications (V1.10)

Data Input*Animal Breeder, Boar, Equine Breeder*

Analysis Info: Animal Species Animal ID
 Genetic Line Ejaculate #
 Batch # Volume (manually or by scale)
 Sample:Extender Collection Technician
 Lab Technician
Dose Info: Sperm / Dose (M/ml or B/ml)
 Dose Volume (ml)
Notes: User-defined
Data Fields: 25 User-Defined Labels/Fields

Animal Motility

Analysis Info: Animal ID
 Study Number
 Ejaculate Volume (manually or by scale)
 Sample:Extender
 Lab Technician
Notes: User-defined
Data Fields: 25 User-Defined Labels/Fields

Live Setup Configuration

Illumination: Interactive illumination setting
 Histogram showing real-time feedback
Motility Setup: Interactive sperm identification setup
 Automatic minimum tail brightness based on Photometer
 Offset
 Minimum head and tail brightness
 Minimum and maximum head size and head elongation
 Real-time feedback through color overlays

Quality Control

Illumination Check: Quick view to confirm illumination and focus
Illumination Status: Acceptable / Unacceptable
Video Playback: Full field playback for capture confirmation only

Security

HT User Groups: Administrative or Basic user
Password Security: Windows-based Users
 Unlimited User IDs and passwords
Setup Access: Analysis Setups restricted to Administrator users only

Video Storage: Save video file of each field captured, along
 with sample information and analysis setup values.

Analysis Sets: Unlimited, User-defined by administrator
 Import / Export setups

Analysis Setup Parameters (Administrative Users Only)

(Setup): Setup Name
Analysis Limits: Min Motility Percent
 Min Progressive Percent
 Min Total Count
Calibration: Objective Name
 X-axis Magnification
 Y-axis Magnification
Camera: Exposure (Ms)
 Gain
 Integrate Enabled
 Integrate Time (Ms)
Cell Detection: Elongation Max (%)
 Elongation Min (%)
 Enable Advanced Tail Detection
 Enable Background Subtraction
 Head Brightness Min
 Head Size Max (μm^2)
 Head Size Min (μm^2)
 Static Tail Filter
 Tail Brightness Min
 Tail Min Brightness Auto Offset
 Tail Min Brightness Mode
Chamber: Capillary Correction
 Chamber Depth (μm)
 Chamber Type (Capillary, Drop)
Illumination: Max Photometer
 Min Photometer
Kinematics: Cell Travel Max (μm)
 Progressive STR (%)
 Progressive VAP ($\mu\text{m/s}$)
 Slow VAP ($\mu\text{m/s}$)
 Slow VSL ($\mu\text{m/s}$)
 Static Algorithm
 Static VAP ($\mu\text{m/s}$)
 Static VSL ($\mu\text{m/s}$)
 Static Width Multiplier
Morph: DMR Confidence (%)
 DMR Droplet to tail end Max (μm)
 DMR Tail Length Max (μm)
 Droplet Confidence (%)
 Droplet Distal Distance Min (μm)
 Droplet Proximal Head Length (μm)
 Morph Normal Minimum Percent (%)
 Min Tail Length (μm)
 Tail Bend Angle Averaging Length (μm)
 Tail Bending Angle Rate Min ($^\circ/\mu\text{m}$)
 Tail Bent Confidence (%)
 Tail Coiled Angle Min ($^\circ$)
 Tail Coiled Confidence (%)
 Tail Confidence (%)
Viadent: Viadent Fluorescing System
Video Capture: Frame Capture Speed (Hz)
 Frame Count