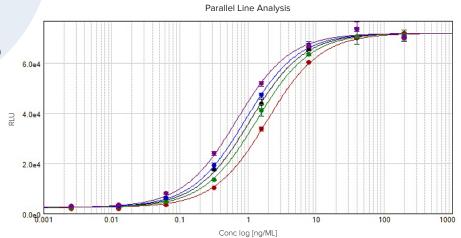
# SoftMax Pro 7 Data Acquisition and Analysis Software





## **KEY FEATURES**

- Over 160 ready-to-run protocols
- Supports traditional and unconventional microplate reader assays, including imaging cytometry and western blots
- Protocol sharing with a strong user community
- Spectral optimization wizard to maximize assay signal window (SpectraMax i3x and Paradigm readers only)



# SoftMax Pro Software

SoftMax Pro® Software is the most published microplate reader control and microplate data analysis software package available to scientists.

The inclusive package of ready-to-run protocols, analysis algorithms, and 21 different curve fit options provides the full solution from data acquisition to analysis to publishing. The FDA 21 CFR Part 11 compliance tools available for regulated laboratories deliver a complete solution to minimize validation costs, provide end-to-end chain of custody, and eliminate the need to validate additional analysis software.

SoftMax Pro is designed to provide both the simplicity needed for new users and the flexibility and power required for advanced data analysis. Every step has been optimized, whether you are acquiring data from a Molecular Devices microplate reader or importing data from another source, to simplify your analysis and reporting.



# SoftMax Pro Software simplifies data acquisition

SoftMax Pro offers a variety of options to initiate the measurement of a microplate, the first step in data acquisition. Whether it's the selection of a pre-written protocol with included acquisition settings or simply setting your own parameters, starting a microplate read is just a few clicks away.

- Pause and resume kinetic reads to run discontinuous kinetic assays that last hours, days, or even weeks
- Set up custom multitask kinetic assays using the drag-and-drop workflow editor
- Measure several different signal outputs simultaneously over time
- Use over 160 pre-written protocols with pre-configured assay parameters and analysis settings to read, analyze, and report without having to become an expert
- Acquire the best data for your assay using several read options including endpoint, kinetic, spectral scan, and well scan
- Obtain the best signal window for your fluorescence-based assays with the fluorescence spectral optimization wizard
- Normalize OD measurements to a 1 cm path length using SoftMax Pro's patented PathCheck® Technology to avoid inconsistent readings from fluctuations in pipetting
- Ensure your results are never lost with automatic data recovery



# Import numerical data from any scientific instrument

SoftMax Pro enables you to import data from acquisition sources other than a Molecular Devices microplate reader. The two different data import options are tailored to quickly get your data into SoftMax Pro to provide a single source of software for all your data reduction needs.

 Prepare data in the provided easy-to-use Excel import templates

# SIMPLE SETUP FLEXIBLE AND POWERFUL

- Import data into SoftMax Pro from any non-Molecular Devices microplate reader
- Import XML-based data directly into SoftMax Pro for an automated workflow



# Flexible calculations and formulas

SoftMax Pro provides the most comprehensive source of microplate data analysis features available in a microplate reader software. Whether your need is simple curve fitting or extensive calculations across multiple plates, SoftMax Pro covers the full range of analysis capabilities.

- Utilize one of the 21 different curve fit options to fit and graph your data in the best possible way
- Apply standards across multiple plates to simplify cross-plate analysis and interpolation
- Easily automate common calculations like relative potency,  $EC_{so}$ , and Z factors
- Clone your plate data for multiple data reduction options, enabling you to test different analysis methods
- Perform custom, mathematical calculations with the SoftMax Pro formula system

## **Image analysis**

SoftMax Pro is capable of analyzing more than just standard microplate data. Acquisition and image-based data analysis may be done with the full set of SoftMax Pro analysis tools.

- Capture and analyze images generated from the SpectraMax® MiniMax™ Imaging Cytometer
- Count cells with StainFree Technology



STANDARDIZE TO A SINGLE ANALYSIS PLATFORM WITH THE SOFTMAX PRO 7 IMPORT FEATURE

- Recognize your cell types with supervised machine learning
- Acquire and analyze western blot images generated from the ScanLater Western Blot Detection Cartridge



#### Publish like a pro

SoftMax Pro provides you with the tools needed to get your data ready to publish or report. The flexible data output formats give you multiple options to get the data where and how you need it.

- Present data in scatter, line, or bar graph format
- Print it the way you see it in SoftMax Pro
- Create reports your way with customizable notes sections and even include your own logo or images
- Export directly to a .xls (Excel) file or to XML for LIMS integration
- Easily save as a PDF file

# GxP tools for FDA 21 CFR Part 11 compliance

SoftMax Pro 7 GxP Software provides FDA 21 CFR Part 11 compliance tools in conjunction with data acquisition and analysis for 20+ Molecular Devices microplate readers.



## **Powerful compliance tools**

For laboratories in regulated environments, the SoftMax Pro GxP Software facilitates adherence to worldwide regulatory expectations with 21 CFR Part 11 compliance tools.

- Apply electronic signatures for verification, authorization, and approval of data files
- Track and record actions in the Audit Trail
- Control user licenses and access for increased security with powerful user management options
- Assign user permissions with a granular level of control
- Set up multiple administrators to manage separate user groups
- Administer user accounts remotely
- Lockout log on failures and set additional security features including automatic idle log out and password aging
- Allow off-line usage and/or guest access
- Host user account files on a TCP/IP server
- Simplify and centralize site-license administration



#### Faster, easier validation

Optional hardware and software validation tools are designed to speed and simplify the validation process by making it easier to demonstrate compliance of data collection and analysis. Available tools include:

- All-inclusive software validation package for SoftMax Pro GxP Software
- Instructions and worksheets for Installation Qualification (IQ)
- Instructions and worksheets for Operational Qualification (OQ) including important curve fits and routine calculations such as parallel line analysis
- Details on SoftMax Pro GxP Software features for implementation of FDA's 21 CFR Part 11 compliance requirements
- Validation plates for precise optical verification of microplate readers with detailed protocols and calculations
- On-site service for IQ-OQ and preventive maintenance by a certified field service engineer that includes:
  - A complete digital qualification report with calibration certification
  - Compliance to 21 CFR Part 11 requirements with electronic signatures and date/time stamps
  - Instant results with automated calculations built into the protocols for error-free procedure
  - Preventive maintenance to assure the best working condition for the microplate reader.



## **System requirements**

## Minimum requirements

- Computer with single-core processor,
   2 GHz or faster
- Windows 7, 32-bit or 64-bit (x86 or x64)
- 2 GB RAM
- 500 MB of available hard disk space
- 1024 x 768 or higher resolution display
- RS-232 serial port or USB 2.0 port with a Keyspan USB-to-serial adapter
- CD drive or external USB drive
- .NET Framework 4.6\*

#### Recommended requirements

- Computer with quad-core processor,
   2 GHz or faster
- Windows 7, 32-bit or 64-bit (x86 or x64) or Windows 8, 32-bit or 64-bit (x86 or x64) or Windows 10, 32-bit or 64-bit (x86 or x64)
- 4 GB RAM\*\*
- 1 GB of available hard disk space or more
- 1280 x 1024 or higher resolution display with 32-bit graphics display and 256 MB video RAM
- USB 2.0 port with a Keyspan USB-to-serial adapter
- CD/DVD drive or external USB drive
- Internet connection
- .NET Framework 4.6\*
- \* .NET Framework 4.6 is installed automatically by the SoftMax Pro installer if necessary.
- \*\* If running on a virtual machine, Molecular Devices recommends a quad-core or faster processor with at least 6 GB RAM. For automation, 8 GB RAM is recommended.

## SoftMax Pro 7 Features



160+ pre-written protocols\*

Chromo-LAL

Antibody titration

Multi-peak identification

Equilibrium/percent binding

Michaelis Menten

Cell Titer-Glo

Parallelism test (Fieller's Theorem)

**ELISA** 

FP – anisotropy

TRF/HTRF

DNA and RNA concentration

Bradford/BCA

Dual-Glo luciferase

... and more!

Read settings\*

Endpoint

Kinetic

Spectrum scan

Well scan: horizontal, vertical, cross, fill

Discontinuous kinetics

Multitask kinetics

Set multiple wavelengths per read

Read partial plates\*

Multi-plate and multi-mode\* protocols

Real-time kinetic data reporting\*

Simulation mode

Robotic and automation interface

Import LIMS template information

Export to a LIMS

Automate software functionality

Integrate with robots

Imaging\*

Western blot

Whole cell: transmitted light and

fluorescence

iPhone App: SoftMax Pro Remote



Sample ID lists / Plate templates Raw data\*\*: text or XML files (Import templates included)



Display data as raw and/or reduced

color map or gray scale

View plate data in 3D graph

Plate cloning for multiple reductions

Kinetic reduction\*

Vmax/time to Vmax

Onset time

Time at: max, min, ½ max

Area under curve

Slope

Custom formulas

... and more!

Curve fits

No fit (scatter plot)

Linear

Semi-Log

Log-Log

Quadratic

Cubic

Quartic

Log-Logit

5-Parameter

Brain Cousens

One-site specific

One-site specific plus nonspecific

Two-site specific

Two-site competition

Michaelis-Menten

Michaelis-Menten (two isozymes)

Exponential growth

Exponential decay

One-phase exponential association

One-phase exponential decay

Two-phase exponential

Gaussian

Cubic spline

Point-to-point

Curve analysis

IC<sub>50</sub>/EC<sub>50</sub>

Interpolation/extrapolation

Custom weighting

Parallel line analysis

Display relative potency and R<sup>2</sup>

Integrated confidence interval display

Bar graphs

Formula syntax helper

Imaging\*: cell viewing and counting



Format notes sections and add images

Custom report layout

Set graph fonts and curve colors

Export graph as a .png file

Export: text, Excel, or XML file

Export in plate or list format

Print as PDF

Autosave: .sda(x), text, Excel, or XML file

Cell images\*

Western blot images\*



SoftMax Pro GxP\*\*\*

FDA 21 CFR Part 11 compliance tools

Electronic signatures

Electronic audit trail

File lockdown after statement signing

Login and password protected

Password aging

Account deactivation after login failure

Central user account administration

Multiple administrators

Transfer user licenses

Modify user and group permissions

Control offline use and guest access

File path or TCP/IP server connection

Software validation package

Custom protocol writing, advanced SoftMax Pro support, and GxP installation services are also available.

<sup>\*</sup> Applies to select plate reader models

<sup>\*\*</sup> Requires SoftMax Pro Import Feature

<sup>\*\*\*</sup> Requires SoftMax Pro GxP software package



## **Robotics and LIMS integration**

By supporting the latest Windows Communication Foundation (WCF) programming technology, SoftMax Pro 7 Software simplifies integration with leading robotics and LIMS providers. SoftMax Pro Software has been integrated by leading LIMS providers.

Export plate data to LIMS via ASCII text or XML

- Leverage the command interface to automate SoftMax Pro Software functionality
- Communicate with liquid handling, plate moving, and storage robots
- Import LIMS template information
- Utilize abundant sample source code in C++

#### **Automation Partners**

SoftMax Pro Software has been integrated by many leading robotics and LIMS partners, enabling both data analysis and instrument control in automated environments.

- · Agilent Technologies
- Beckman Coulter
- Caliper Life Sciences
- Gilson
- Hamilton
- HighRes Biosolutions
- Hudson Robotics
- · Labware LIMS Solutions
- Peak Analysis & Automation
- Tecan
- Thermo Scientific
- Titertek
- Tomtec
- Torcon Instruments

Product	Annual Subscription	Non-Expiring
SoftMax Pro Standard Software Windows 7/8/10 compatible	One year subscription to the latest version of SoftMax Pro 7. Includes one activation key which expires after one year. Annual renewal.	Non-expiring license for the latest version of SoftMax Pro 7. Includes four activation keys.
	Part number: SMP7 PROF SUBSCR SMP7 ACAD SUBSCR*	Part number: SMP7 PROF SMP7 ACAD*
	*For verified academic institutions	*For verified academic institutions
SoftMax Pro GxP Software Windows 7/8/10 compatible		Latest version of SoftMax Pro 7 GxP. Includes trifold CD package with GxP Admin, SoftMax Pro 7 GxP, Validation Pack CDs, GxP User License certificate, SoftMax Pro 7 GxP Product Activation Key Sheet, and Compliance certificate.
		Part number: SMP7X GxP*
		User license part number: SMP7 GxP License
		*Requires purchase of any amount of user licenses (minimum three). Tiered pricing is based on number of user licenses purchased.
SoftMax Pro Importer XLS Requires SoftMax Pro 6.4.1 or higher	One year subscription to enable import of data into SoftMax Pro from an Excel-based template. Includes one activation key which expires after one year. Annual renewal.	
	Part number: SMP.IMPORT.XLS	
SoftMax Pro Importer XLS and XML Requires SoftMax Pro 6.4.1 or higher	One year subscription to enable import of data into SoftMax Pro from an Excel-based template or XML file. Includes one activation key which expires after one year. Annual renewal.	Non-expiring license to enable import of data into SoftMax Pro from an Excel-based template or XML file. Includes one activation key for use on one computer.
	Part number: SMP.IMPORT.XLS.AND.XML	Part number: SMP.IMPORT.XLS.XML.NONEXP

#### Contact Us

Phone: 800.635.5577

Web: www.moleculardevices.com

Email: info@moldev.com

Check our website for a current listing

of worldwide distributors.

#### Regional Offices

USA and Canada China (Beijing) Japan (Osaka) Brazil +1.800.635.5577 +86.10.6410.8669 +81.6.7174.8331 +55.11.3616.6607

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