Exponent

Exponent - software for the TA-XTPlus texture analyser.

Rating: Not Rated Yet
**Price**

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Description

Texture analysis is the mechanical testing of food, cosmetics, pharmaceuticals, adhesives and other consumer products either in compression or in tension.

The TA.XTplus Texture Analyser assesses textural properties by capturing force, distance and time data at a rate of up to 500 points per second which is then displayed by fully integrated Exponent 32-bit software.
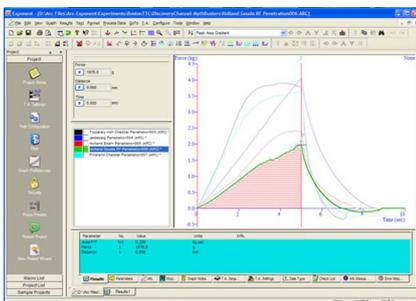
For the TA.XTPlus and TA.HDPlus, the full Exponent software package is included and features the following advantages:

- Reload all settings & analysis & reports by clicking of single project button

- Long file name support - make files easier to locate and understand

- Copy & paste directly into any Windows-based program (e.g. Word, Excel, PowerPoint)

- Calculated results can be automatically exported to LIMS programs or trigger automatic emails or text messages

- Dock-able and customizable toolbars - allow the user to configure their own shortcuts and tools menu

- Graphs - windows are tabulated so that all information relating to the graphs, such as test settings, parameters and results, are filed together in a user-friendly, accessible manner

- Projects, results and macros have all been enhanced

- Reports have been redesigned to use a more familiar word processing environment

- Test Maker utility program to assist user to write custom sequences

- Thumbnails - allow the user to preview the file before it is opened

The full feature set for the Exponent texture analysis software package includes all of the following capabilities and offers a high level of customization for unique texture testing challenges:

- Any Computer, Any Windows Operating System, Completely Portable; No A/D Card Required - The TA.XTPlus can operate on any Windows operating system (Win 95, 98, ME, NT, 2000, XP-home, XP-pro, Vista or Windows 7) so it can migrate to new computers as you upgrade your computers. It communicates with your computer via the serial port, so it can be used with any desktop, laptop, or other extremely small computers.

- Multi-channel Data Acquisition - The ability to plug-in peripheral instruments has been incorporated into the design to provide multi-channel data acquisition. This allows for many other measuring devices to be used in conjunction with the TA.XTPlus and their data simultaneously collected, such as temperature and humidity monitors.

- Totally Programmable Multi-stage Testing - Multi-stage test programming facilities so the user can define individual arm movement sequences at various speeds and distances. This unique control feature enables the most complex test protocols to be established. As a result, the Texture Analyzer is no longer limited to fixed library tests. However, all the original TA.XT2 tests are provided for your convenience and can be accessed with just a few mouse clicks.

- No Keyboard is required and data acquisition is direct to computer - No Keyboard is required and the instrument conducts the data acquisition in real time and simultaneously transfers the data to your computer.

- Force Calibration - Only a single point Force calibration of Exponent and the Texture Analyzer are required. Calibration can be performed with any weight up to the capacity of the load cell installed in the instrument. This offers convenience and maximizes accuracy.

- Probe Calibration - Direct probe position calibration from any reference surface.

- Calibrate Frame Stiffness - Single and Multiple point frame stiffness compensation is an optional calibration procedure.

- Check Force - This allows the user to quickly and accurately check to see if the complete system is calibrated correctly.

- TA Sequences - This window allows the user to specify the parameters for the test procedure. Advanced features within a test can be hidden for simplification. All TA Settings parameters have a caption which explains what each parameter does.

- Programmable Sequencing - This allows total flexibility in the programming of the Texture Analyzer arm movement. The Texture Analyzer is no longer limited to fixed library tests.

- Test Library - A series of industry standard methods and historical Texture Analyzer tests are included along with 'enhanced' versions of these tests. These projects and sequences can be loaded and used with a single click.

- Project Window - A Project combines all of the components required to initiate a complete Analysis procedure. This window is dock-able and hide-able with multiple panels to group related data.

- Run a Test Window - This window establishes the test options and post-test parameters, e.g. file name, probe used etc. Details about the sample and attachments can also be specified for further analysis. Long file names provide the ability to insert more detailed information which is useful when locating the test file for future viewing.

- Graph Window - Displays the real-time data acquired during the test. Tabbed graph windows for easy access to all relevant archive file information are present. Graphs can also be exported as .bmp or .jpg.

- Data Collection Rate - This is the speed at which data is collected during the test. This aspect is particularly important when testing products that fracture or require high speed separation such as during the testing of adhesives. The data buffer is limited only by free memory.

- Axes - The graph axes can be changed to display the data in different X and Y combinations. Logarithmic axes are an additional option.

- Data Analysis Icons - Icons for the calculations of such parameters as Area, Gradient, Time Difference, Mean, Count Force peaks, Maxima/Minima etc. are quickly accessible on the tool bar or minimized to only those required by the user via the Customizable Toolbar option.

- Macro Window - A Macro simplifies repetitive analysis and display. A set of instructions are listed and executed which automatically collect data from the graph. Tests can be automated with either simple or intricate macros which is ideally suited to a production environment. Tabbed windows for groups of commands provides simplified listings.

- Macro Samples - An extensive library of macro samples are included which provided quick analysis of recommended application methods

- Results Window - This window tabulates results in a customized spreadsheet format. Rows and columns can be added to manipulate data using either your own or stored Formulae e.g. Standard Deviation, Average. Multiple worksheets are available to separate product parameters from results.

- Chart Window - A chart gives a visual representation of the data from the Results window. Select from 27 chart types (2D and 3D) and define rotation, position, 3D lighting properties, legend styles, base and wall styles, and axes type (stacked, normal or %).

- Report Window - A Report is a user formatted presentation of the complete analysis incorporating Graph, Results, Chart windows, plus other data and graphics. A WYSIWYG word processor type interface is incorporated with adjustable fonts and styles, Spell checker and Thesaurus. Objects (graphs, pictures, etc.) can be inserted as a character or floating with selectable word wrap options. Test parameters are inserted as fields. Support for tables and OLE objects.

- Help - This section includes information on operation, data analysis, application studies, recommended probes for testing, abstract of published papers, an Introduction to Texture Analysis and animations.

- Exporting Data - Spreadsheets, text or images can be exported to other Windows applications for further specific manipulation/presentation.

- Sample Files - For ease of testing more than 150 product projects have been included - these projects can also be launched automatically from an application study of your choice within the Help file section.

The Exponent texture analysis software program also offers a host of special features:

- BASIC Macro Language - full Debug facilities including breakpoints, single step, step over, etc; access to advanced Texture Exponent data and commands

- Force Filtering - 10Hz, 40Hz, 100Hz, 400Hz filters for flexibility. This allows 'Advanced' users to customize their bandwidth of measurement

- PID (Proportional, Integral, and Differential) term control for improved tracking performance

- User Configurable Shortcut Keys

- User Configurable Tools Menu

- Workspaces for saving window layouts in your preferred configuration

- Dock-able and Customizable Toolbars

- Built-in Advice and Assistance

- Thumbnails - graphics allow you to see the previously saved file it is opened.

- Language Editor - one software version has all language options; choose the language you prefer at the User window

Exponent Software Requirements

- 1 GHz CPU

- 1 GB RAM

- 500Mb of free hard disc space

- SVGA Graphics (1024x768x24 bit graphics)

- Windows XP Home or XP Pro, Vista or Windows 7

- Mouse

- RS232 port @ 115,200 Baud port (only if connected to instrument)

- Sound card (optional)

- DVD/CD-ROM (or better)

- Internet access for updating purposes (optional)

- Windows XP, Vista and 7 (all registered trademarks of Microsoft)