Additional Functions for Next Series and Downloadable Software

By registering Next Series measuring instruments on the user support site "IMADA Connected", convenient online services such as function additions, firmware updates, and downloads of software and instruction manuals become available (some services are chargeable). Installing additional functions on the measuring instruments or downloadable software enables more versatile force measurements and contributes to improved efficiency in measurement data management and analysis.

- To use these services, user registration and product registration on the user support site "IMADA Connected" (https://www.imada-connected.com/) are required. In addition, except for certain models, these services are available only for Next Series measuring instruments.

[Supported Next Series Measuring Instruments] (excluding software)

Force Gauge / Torque Gauge / Amplifier / Dedicated Tester	
ZTS/ZTA series	Firmware version 5.00 or later
eZT series	
FA Plus2/eFA Plus2 series	
DTXS/DTXA series	
HTGS/HTGA series	
IPTS series	
ACT-1000N	Firmware version 2.00 or later
QSMA-400	(All firmware versions are supported)

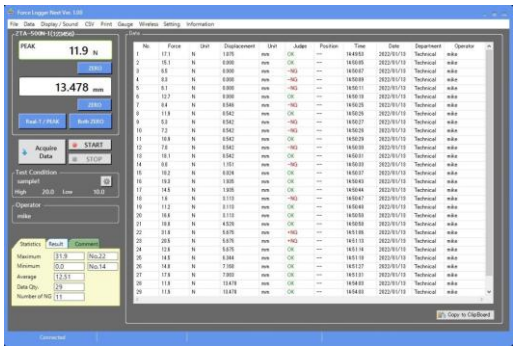
- For information on how to check the firmware version, please refer to the page "About Next Series (IMADA Connected)" on the Product & Service website (https://www.forcegauge.net/en/service/next_series). Measuring instruments with firmware versions that do not support the Next Series can also be upgraded (for a fee). Please contact us for details.
- DSV Series and DST Series are not applicable to the Next Series. However, for instruments with firmware version 1.02 or later, the instruction manual and Force Logger Next are available for download by registering the instruments on IMADA Connected. (Firmware updates and additional functions are not supported.)

Test Stand	
MX3 series	(All firmware versions are supported)
EMX2 series	

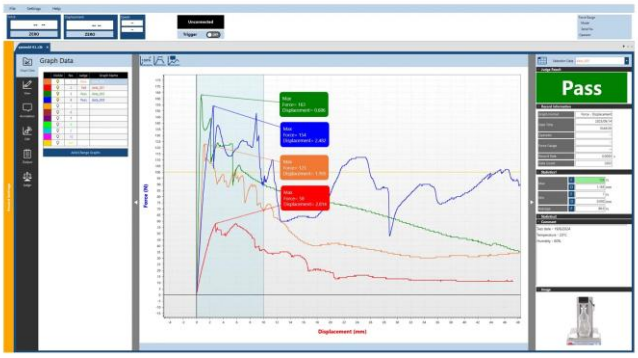
[Downloadable Software]

For some Next Series measuring instruments, registering the product on IMADA Connected enables software downloads. The downloadable software, like Next Series measuring instruments, supports online version updates and the download of additional functions. (*Please note that there are limitations on the number of software downloads. For details, please contact us.*)

Software for Force Gauges and Torque Gauges (refer to page 6 for supported models)	
Force Logger Next	This software is designed to import and manage measured values, such as peak values and continuous data (up to 10 times per second), on a PC. It includes functions not available in the Force Logger (CD version) supplied with the measuring instrument, and additional downloadable functions can be added via IMADA Connected.
Force Recorder Next Standard (Available for a fee: dedicated download card)	This software is designed to record continuous data via high-speed communication of up to 2000 Hz and to generate graphs. The Standard version records and plots Force-Time and Torque-Time graphs. It is equipped with a wide range of graph editing functions, enabling more advanced and efficient recording and analysis of measurement results. Recorded data can also be exported in CSV format.
Force Recorder Next Professional (Available for a fee: dedicated download card)	This graphing software, in addition to the functions of the Standard version, records and plots the Force-Displacement and Torque-Angle graphs. When used in combination with dedicated additional functions, it enables further advanced analysis of measurement results.



Force Logger Next



Force Recorder Next series

Software for Motorized Test Stands (refer to page 6 for supported models)	
CS Test Preset Builder	This software is designed for setting test conditions for Next Series motorized test stands. Test conditions can be easily configured using templates. In addition, each set of test conditions can be saved and recalled as a preset, improving the efficiency of switching between test conditions.

Other Software	
Quad Graph Drawer	This is graphing software dedicated to QSMA-400. It simultaneously displays, records, and graphs measured values input to QSMA-400. *The software is available for download by registering QSMA-400 on IMADA Connected.*

[Downloadable Additional Functions]

For Next Series measuring instruments and software, additional functions can be downloaded via IMADA Connected (some functions are available for a fee).
Additional functions are released on an ongoing basis. By registering the product on IMADA Connected and enabling the receipt of notification emails, information will be sent when new functions are released.

Additional Functions for Force Gauges, Torque Gauges, and Dedicated Testers (refer to page 6 for supported models)	
RS232C Print Function	Measurement data and statistical values can be printed using an RS-232C printer. This is useful in environments where bringing in a PC is difficult or when preventing data tampering is required. *(Verified RS-232C printer: Sanei Electric BL2-58 series)*
Calibration Reminder Function	Based on the pre-registered scheduled calibration date, a calibration reminder is displayed when the measuring instrument is powered on, starting 30 days before the scheduled calibration date. This function helps prevent missed calibrations and supports effective calibration management of measuring instruments.
Continuous Peak Mode	Peak values can be measured continuously and automatically saved without button operation. This function improves measurement efficiency in applications where the same sample is measured repeatedly.
Overload Pre-alarm Function	The alarm sounds when applying force reaches 90% of the measurement instrument's capacity. By providing an overload pre-alarm, this function supports safe operation of the measuring instrument.
Peel Strength Display	Force values are automatically converted and displayed in peel strength units. This function contributes to improved productivity in testing and inspection processes defined by standards and other requirements. Units can be selected from more than 10 options, including N/cm, N/10 mm, and kN/m. Peel strength data can also be directly imported into the downloadable software Force Logger Next. (Installation of the optional additional function for Force Logger Next, "Peel/Pressure Data Import Function," is required.)
Pressure Conversion Function	Force values are automatically converted to pressure units and displayed, contributing to improved productivity in inspection processes. Units such as Pa, kPa, and N/m² can be selected. Pressure data can also be directly imported into Force Logger Next. (Installation of the optional additional function for Force Logger Next, "Peel/Pressure Data Import Function," is required.)
Serial Output for Embedded	Serial output is available for integration with production equipment such as PLCs. This is useful for production environments, for example, to control equipment based on measurement results or to manage measurement data together with data from other measuring instruments using the same software.
Preset Test Conditions	Up to 30 measurement condition patterns can be saved as presets for quick switching, improving measurement efficiency. Combined with the instrument setting lock function, this also helps prevent incorrect settings by operators. Configuration is performed using *Force Logger Next*.
High Resolution Function (Available for a fee: Download Card Basic)	This function lowers the minimum value that can be displayed on a force gauge by one digit. By installing the function in a force gauge with a relatively high force range, low force measurements can be performed without preparing another force gauge with a low force range. *Note: Measurement accuracy, the number of displayed digits and maximum force value cannot be changed.*

- For details, please refer to the document "Overview of Additional Functions for Next Series Devices"

Additional Functions for Force Logger Next Software	
Language Pack	Chinese, German, Korean, Spanish, Italian and French language pack can be downloaded and added to the software.
Zoom in Function	Measured values and judgment results can be enlarged and displayed in a dedicated window. This function is convenient when measurement results and judgment results need to be presented more clearly.
Peel/Pressure Data Import Function	Data in peel strength units (such as N/cm, N/10 mm, and kN/m) and pressure units (such as Pa, kPa, and N/m²), obtained from force gauges equipped with the "Peel Strength Display Function / Pressure Conversion Function", can be directly imported into the software. This facilitates efficient data management for peel strength and pressure measurements.
Excel Data Writing Function	This function allows measured values and various data to be written directly to a specified Excel file by operating the SEND button on the measuring instrument.
Excel Template "Histogram"	A template that automatically records measurement data into a histogram. It allows verification of whether quality variations of samples manufactured under the same conditions fall within specified standards, as well as analysis of how the data are distributed. *Use of this function requires the separate download of the "Excel Writing Function."*
Excel Template "Scatter Plot"	A template that automatically records measurement data into an Excel scatter chart plotted using two characteristic values: force and displacement. *Use of this template requires the separate download of the "Excel Writing Function."*

Additional Functions for Force Recorder Next Software ***Note: Additional function cannot be added to the floating license version software.***	
Friction Testing Module (Available for a fee: Download Card Basic)	This function automatically calculates the coefficient of friction from measured values and supports software configuration in accordance with applicable standards. By pre-setting parameters such as the weight of the load (mass) and the calculation range, the static coefficient of friction and the average kinetic coefficient of friction are automatically calculated and displayed based on the measurement results.
Peel Testing Module 1 (Available for a fee: Download Card Advanced)	This function automatically converts measured force values into peel force units and displays the results. By presetting parameters such as sample width and conversion units, measurement results are automatically converted into peel force units (e.g., N/10 mm) and displayed. Includes templates compliant with packaging industry standards, such as JIS Z 0237 "Testing Methods for Adhesive Tapes and Sheets," facilitate easy and compliant testing.
Peel Testing Module 2 (Available for a fee: Download Card Advanced)	As with Peel Testing Module 1, this function automatically converts measured load values into peel strength and displays the results. Includes templates with conditions compliant with electronics manufacturing standards, such as JIS C 6481 "Testing Methods for Copper Clad Laminates for Printed Wiring Boards."
Pressure/Stretchability Measurement Module (Available for a fee: Download Card Basic)	(1) Conversion of measured values to pressure units (load per unit area), and (2) Conversion of displacement to stretchability and stretchability rate (%). Pressure units can be selected from Pa, kPa, MPa, GPa, and N/mm². *Conversion to stretchability and stretchability rate is available exclusively for Force Recorder Next Professional.*
Switch Operating Force Testing Module (Available for a fee: Download Card Light)	This function automatically calculates the tactile characteristics of push-button switches. Based on the measurement results, the switch operating force and bottom reaction force are detected, and indicators such as click ratio are automatically calculated and displayed. It also includes support for software configuration in accordance with applicable standards. *Support for standards compliance is available exclusively for Force Recorder Next Professional.*

Additional Functions for Force Recorder Next Software ***Note: Additional function cannot be added to the floating license version software.***	
Value Search Function	By pre-setting search conditions (force value, time, or displacement), data that match the specified conditions are automatically extracted after measurement. Up to four search conditions can be configured, and for each condition, the first data point that matches the condition after measurement is extracted. Search conditions can also be changed after measurement to perform a new search.
Spring Rate Measurement Module (Available for a fee: Download Card Basic)	This function automatically calculates and displays the spring rate based on measurement results. It can be used for measurements of three types of springs: compression springs, tension springs, and disc springs. ● This function is available exclusively for *Force Recorder Next Professional*. ● When measuring disc springs, use in combination with the Deflection Correction Function is recommended.
Work Calculation Module (Available for a fee: Download Card Basic)	This function automatically calculates and displays the following: The area of the force–displacement curve (work) / The area of the force–time curve (impulse) When the force–displacement curve is plotted, it calculates and displays three types of work: Input work (forward) / Recovered work (return) / Lost work (difference between input and recovered) ● When the force–time graph is plotted, the impulse is shown as the input work. Recovered work and lost work are not calculated in this case.
Deflection Correction Function (Available for a fee: Download Card Basic)	This function corrects deflection caused by the application of load to the force gauge, load cell, or test stand, and reflects more accurate displacement values in the measurement results and graphs. ● This function can be used in combination with other additional functions. ● This function is available exclusively for *Force Recorder Next Professional*.
Bending Stress Measurement Module (Available for a fee: Download Card Basic)	By entering test conditions and sample information in advance, bending stress is automatically calculated from the measurement results and displayed. Supported sample shapes are rectangular bars and round bars, and the function supports three-point bending tests, four-point bending tests, and cantilever beam tests.
Excel Data Writing Function (Available for a fee: Download Card Basic)	This function automatically writes measurement results (including statistical values and other information) to an Excel file. ● The supported Excel file formats for saving are limited to [.xlsx] and [.xlsm]. ● This function can be used in combination with other additional functions.
Yarn Tenacity Testing Module (Available for a fee: Download Card Basic)	(1) Conversion of measured values to yarn tensile strength units (N/tex, cN/tex, N/dtex, and cN/dtex) (2) Conversion of displacement to stretchability and stretchability rate. Conversion to stretchability and stretchability rate is available exclusively for *Force Recorder Next Professional*.
Multi-Peak Extraction Function (Available for a fee: Download Card Basic)	This function extracts and displays force data at a specified peak point (e.g., the 3rd peak) on the graph. In addition to the first and last peaks, up to five peak points can be extracted. For peak point detection, the threshold value set for the 1st/2nd Peak Value function is used. The total number of peaks detected across the entire graph, as well as the ratio between the first and last peak values, are also displayed automatically.
Multi-Level Evaluation Function (Available for a fee: Download Card Basic)	This function evaluates measurement results (such as maximum and average values) across up to five levels. Evaluation items and evaluation criteria can be configured, and the display content for each level can also be customized. Judgment results can be output in CSV format or included in reports. ● This function can be used in combination with other additional functions.

- For details, please refer to the document "Additional Functions for the Downloadable Graphing Software Force Recorder Next Series."
- Additional functions other than those listed above can also be provided as customized options. Please contact us for details.

[Supported Models for Additional Functions and Software]

Additional functions and downloadable software can be downloaded by registering compatible Next Series models on IMADA Connected. A separate download card is required for paid additional functions and paid software. For software, after installation, it can also be used with measuring instruments from earlier generations than the Next Series (limited to supported models).

Additional Functions for Force Gauges, Torque Gauges, and Dedicated Testers							
	ZTS/A	HTGS/A	eZT	DTXS/A	FA Plus2 eFA Plus2	IPTS	ACT-1000N
RS232C Print Function	√	√	√	√	√	N/A	N/A
Calibration Reminder Function	√	√	√	√	√	√	N/A
Continuous Peak Mode	√	√	√	√	√	N/A	N/A
Overload Pre-alarm Function	√	√	√	√	√	√	N/A
Peel Strength Display	√	N/A	√	N/A	√	N/A	N/A
Pressure Conversion Function	√	N/A	√	N/A	√	N/A	N/A
Serial Output for Embedded	N/A	N/A	N/A	N/A	N/A	N/A	√
Preset Test Conditions	√	√	√	√	√	N/A	N/A
High Resolution Function *1	√	√	√	√	√	N/A	N/A

*1 Download Card Basic is required.

Downloadable Software for Force Gauges, Torque Gauges, and Dedicated Testers							
	ZTS/A	HTGS/A	eZT	DTXS/A	FA Plus2 eFA Plus2	IPTS	ACT-1000N
Force Logger Next *1	√	√	√	√	√	√	N/A
Force Recorder Next Standard *2	√	√	√	√	√	√	N/A
Force Recorder Next Professional *2	√	√	√	√	√	√	N/A

*1 Force Logger Next can also be downloaded by registering DSV/DST Series instruments with firmware version 1.02 or later.

*2 Registration of a compatible product and a dedicated download card are required for Force Recorder Next series.

Downloadable Software for Test Stands							
	MX	MH	MX2	MH2	EMX	MX3	EMX2
CS Test Preset Builder	N/A	N/A	N/A	N/A	N/A	√	√

Additional Functions for the Downloadable Force Recorder Next Series			
	Force Recorder Next Standard	Force Recorder Next Professional	Use in Combination with Other Functions *1
Friction Testing Module *2	√	√	N/A
Peel Testing Module 1 *3	√	√	N/A
Peel Testing Module 2 *3	√	√	N/A
Pressure/Stretchability Measurement Module *2	√ *Note: Stretchability and Stretchability rate cannot be calculated.*	√	N/A
Switch Operating Force Testing Module *4	√ *Note: Standard templates are not available.*	√	N/A
Value Search Function	√	√	N/A
Spring Rate Measurement Module *2	N/A	√	N/A
Work Calculation Module *2	√ *Note: Only impulse cannot be calculated.*	√	N/A
Deflection Correction Function *2	N/A	√	√
Bending Stress Measurement Module *2	√	√	N/A
Excel Data Writing Function *2	√	√	√
Yarn Tenacity Testing Module *2	√ *Note: Stretchability and Stretchability rate cannot be calculated.*	√	N/A
Multi-Peak Extraction Function *2	√	√	N/A
Multi-Level Evaluation Function *2	√	√	√

*1 Two or more functions marked with “N/A” cannot be enabled at the same time (download and installation are possible). Functions marked with “√” and “N/A” can be enabled simultaneously.

*2 A Download Card Basic is required.

*3 A Download Card Advanced is required.

*4 A Download Card Light is required.

- Additional functions cannot be added to the floating license versions of the *Force Recorder Next* series (*Force Recorder Next Standard-FLT* and *Force Recorder Next Professional-FLT*).

[Cautions]

- Information in this document is subject to change without prior notice.
- Do not copy and use this content without authorization.