

# Additional Functions and Various Services for Next Series

Next Series measurement devices features easy addition of necessary functions even after purchase, as well as downloadable related software and the instruction manuals, which enhances the versatility of Next Series devices in force measurements and allows the users to improve the collection and analysis of measurement data as well as the management of the instruments.

By creating a user account and registering your products on the user support site "IMADA-Connected (<a href="https://www.imada-connected.com/">https://www.imada-connected.com/</a>)", a user of Next Series devices enables to download the following additional functions (additional firmware functions) to the device, related software and its additional functions (include custom-made ones) and the instruction manuals.

### 1. Additional Functions for Measurement Devices (selectable)

The below additional functions are available now. We plan to publish other additional functions in near future. The notice will be sent to you if you have registered the products and accept Email notification.

Additional functions						
RS232C Print Function	It enables you to print the tested data and statistics by connect to a RS232C printer. It is useful to prevent data tampering as the results are printed immediately after test. Moreover, PC is needless.					
Calibration Reminder Function	The scheduled calibration date displays from 30 days before the pre- registered date. Useful for systematic calibration management.					
Continuous Peak Mode	It allows you to continuously measure and automatically save peak value without pressing any buttons. It is useful for testing efficiency improvement when measuring the same sample repeatedly.					
Overload Pre-alarm Function	The alarm sounds when applying force reaches 90% of the measurement instrument's capacity. It helps prevent overload and improve safety.					
Peel Strength Display	The force unit is automatically converted to peeling force unit such as N/cm and displayed. It is useful for the peel tests with unit requirement to comply with the standards and quality control processes, where peak values are required. The data can be directly acquired by Force Logger Next with peel/pressure data import function.					
Pressure Conversion Function	The force unit is automatically converted to pressure unit and displayed. It helps improve the efficiency of the pressure tests for quality control processes. The pressure units can be selected from Pa, kPa, N/m², etc. The tested data can be directly acquired by Force Logger Next with peel/pressure data import function.					
Serial Output for Embedded	Serial data which is readable to production equipment such as PLC and measurement system can be output. The test result can be serial output for system control or data management of other devices together, which is useful for system automation and measurement efficiency improvement.					
Preset Test Conditions  Up to 30 test patterns can be saved and selected in the measurement efficiency as the present conditions are immediately recallable to suit various samples. To present the conditions are immediately recallable to suit various samples.						



Additional functions				
	changing test conditions by mistake, menu lock function is available. Force Logger Next is required to use this function so please download the software.			
High Resolution Function (Chargeable Option)	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.  *Measurement accuracy, the number of displayed digits and maximum force value cannot be changed.  *Download Card Basic is required.			

## **Software and Additional Functions**

The below software and additional functions are available for download.

Software								
	This software acquires single and continuous data of measuring devices to							
Force Logger Next	show on the Data Table. It equips additional functions such as operat							
	history tracking which Force Logger (CD version) does not have.							
	Graphing software that precisely records the force-time and torque-time							
	transitions in force measurement through high-speed communication at a							
Force Recorder Next	maximum of 2000 Hz. The easy-to-use interface and various preset functions							
Standard	are useful to increase the efficiency of force measurement and the analysis							
	of its results.							
	*The Dedicated Download Card is required.							
	This advanced graphing software has not only all functions of Force							
	Recorder Next Standard but can also handle displacement and angle of							
Force Recorder Next	and graphing. While maintaining the same easy-to-use interface and various							
Professional	preset functions as Standard, the software can be used for more force							
	measurement analysis.							
	*The Dedicated Download Card is required.							

Additional functions for Software						
Additional Functions for Force Logger Next						
Language Pack  Chinese, German, Korean, Spanish, Italian and French language particle be downloaded and added to the software.						
Excel Data Writing Function	The tested data can be directly written to the preset Excel file by only press the [SEND] button of the measurement devices. Create the inspection sheet or test record in Excel file with preset columns, then the tested value and other related date can be input to it automatically.					
Results Zoom in Function	The tested value and judgement results (OK/NG) can be zoomed in and displayed in the special window of the software. It is useful to observe the testing and judgement results clearly and quickly.					
Peel/Pressure Data Import Function	The peeling force units (N/cm, N/10mm, kN/m, etc.) and pressure unit (Pa, kPa, N/m², etc.) data which tested by force gauge next series with conversion to peeling force/pressure function, can be directly acquired by this function. It is useful for peel/pressure data management.					



Additional functions for Software							
Excel Template "Histogram"	A function that allows measurement data to be automatically recorded in Excel histogram template. It is possible to check the variation of the quality and whether quality of samples manufactured under the same conditions meets the standard.  *Pre-installation of "Excel Data Writing Function" is required.						
Excel Template "Scatter Plot"	The function to automatically record measurement data in Excel scatter plot template which locates each data by its two kinds of characteristic values.  *Pre-installation of "Excel Data Writing Function" is required.						
Additional Functions for For	Additional Functions for Force Recorder Next						
Friction Testing Module (Chargeable Option)	The function to automatically calculate the coefficient of friction from the measurement value and to support compliance with measurement standards. By pre-setting the weight and the calculation interval, it automatically calculates and displays the coefficient of static friction and the average coefficient of kinetic friction from the measurement results. It also displays the standard compliance judgment result.  *Download Card Basic is required.						
Peel Testing Module 1 (Chargeable Option)	The function to automatically convert measurement results into peel force units and to support compliance with measurement standards. By pre-setting conditions such as sample width, conversion unit, and calculation interval, it automatically converts and displays the measurement results in the set peel units (Ex. N/10mm, etc.). It also displays the standard compliance judgment result.  *Download Card Advanced is required.						
Pressure/Stretchability Measurement Module	This function describes force values per area in pressure units such as Pa, kPa, MPa, GPa, and N/mm² It can also calculate stretchability from displacement values.  *Stretchability conversion is available with Force Recorder Next Professional only.  *Download Card Basic is required.						
Switch Operating Force Testing Module	Easily evaluate the switch characteristics when pressing a push-button type switch, allowing measurements according to preset standards.  Calculate and display the results such as click rate, etc. from the operating force and releasing force of the switch.  This function is useful for evaluating "hardness" and "click feeling" of switches by quantifying characteristics such as push-ability and click feeling of the switch.  *Standard conforming test requires a force-displacement graph, which is only supported by Force Recorder Next Professional.  *Download Card Light is required.						
Value Search Function	It is possible to search up to four locations on the graph, such as the displacement value of a specific force value or the force value of a specific displacement. Value search is available both pre-testing and post-testing. Multiple search condition presets can be registered by utilizing the preset registration function.  *This function is free of charge.						



Additional functions for Software					
Spring Rate Measurement Module *Only for Force Recorder Next Professional	The function to automatically calculate the "spring rate" which is the force required to pull or compress a spring and display the measurement result. It can be applied to the following three types of springs.  (1) For a compression spring, able to calculate Spring Rate between P1(%) and P2(%) after inputting total deflection of the sample compression spring.  (2) For a tension spring, able to calculate Spring Rate between P1(%) and P2(%) after inputting maximum force applied to the sample tension spring.  (3) For a disc spring, able to calculate the force value at P1(%) after inputting total deflection of the sample disc spring.  *The Deflection Correction Function must be used in combination with measuring disc springs.  *Download Card Basic is required.				
Deflection Correction Function *Only for Force Recorder Next Professional	The function to correct the deflection caused by applying a load to a force gauge, load cell, or test stand and reflect more accurate displacement values in measurement results and graphs. This function can be used in combination with other additional chargeable functions, such as the Pressure/Stretchability Measurement Module and the Spring Rate Measurement Module, to calculate stretchability and spring rate according to the corrected displacement value. In particular, the relationship between force and displacement can be measured more precisely in tests with large force - small displacement values.  *Download Card Basic is required.				
Bending Stress Measurement Module	The function to automatically calculate and display the "bending stress", which is one of the key indicators of bending characteristics. Supported sample shapes include square/rectangular bars and round bars, and the function is compatible with 3-Point Bending Test, 4-Point Bending Test and Cantilever Beam Test.  By entering the required parameters in advance according to the selected test method, bending stress is calculated automatically.  *Download Card Basic is required.				
Excel Data Writing Function	The function to automatically write statistical measurement results and other information to a specified Excel spreadsheet. The active cell automatically moves to the next row, enabling continuous data entry. Supported Excel file formats are [.xlsx] and [.xlsm].  *Download Card Basic is required.				

Customized Functions				
Force Logger Next	In addition to the additional features listed above, Force Logger Next allows customers to download and implement customized features on the user support site, reducing delivery lead time by eliminating the need for a CD.			

# 2. Instruction Manual

The instruction manuals of the Next Series products are available for download.

## 3. List of Additional Downloadable Functions

Downloadable software or additional functions vary by product. Check the list below for details.



Compatible Next Series Products List for the downloads									
Download Items	Details		ZTS/A	HTGS/A	eZT	DTXS/	FA Plus 2	IPTS	ACT- 1000N
_	RS232C Pri	nt Function	√	√	<b>V</b>	√	√	N/A	N/A
or r	Calibration	Reminder Function	√	√	√	$\sqrt{}$	√	√	N/A
Additional functions	Continuous	Peak Mode	√	√	√	$\sqrt{}$	√	N/A	N/A
tion	Overload Pr	e-alarm Function	√	√	√	$\sqrt{}$	√	√	N/A
al fi	Peel Streng	th Display	√	N/A	$\sqrt{}$	N/A	$\sqrt{}$	N/A	N/A
ent unc	Pressure Co	onversion Function	√	N/A	$\sqrt{}$	N/A	√	N/A	N/A
tior	Serial Outpu	ut for Embedded	N/A	N/A	N/A	N/A	N/A	N/A	√
Additional functions for measurement devices	Preset Test	Conditions	√	√	<b>V</b>	√	√	N/A	N/A
<i>G</i>	High Resolu	ıtion Function	√	√	<b>V</b>	√	√	N/A	N/A
S	Force Logg	er Next	$\checkmark$	√	$\sqrt{}$	√	√	√	N/A
Software	Force Reco	rder Next Standard	√	√	<b>V</b>	√	<b>V</b>	<b>V</b>	N/A
are	Force Reco	rder Next Professional	√	√	<b>V</b>	√	√	<b>V</b>	N/A
		Language Pack	√	V	V	V	V	<b>√</b>	N/A
Addi		Excel Data Writing Function	V	<b>√</b>	√	<b>V</b>	<b>√</b>	<b>√</b>	N/A
Additional functions for software	Force	Results Zoom in Function	V	√	√	√	√	√	N/A
nal funct software	Logger Next	Peel/Pressure Data Import Function	$\sqrt{}$	*	√	*	√	*	N/A
tions		Excel Template "Histogram"	√	√	√	√	√	√	N/A
for		Excel Template  "Scatter Plot"	V	√	√	V	√	V	N/A
		Friction Testing Module	√ /	*	√ /	*	√ /	*	N/A
		Peel Testing Module 1	√	*	√	*	√	V	N/A
Add		Pressure/Stretchability Measurement Module	V	*	√	*	√	*	N/A
dition		Switch Operating Force Testing Module	V	*	√	*	√	*	N/A
<u>a</u>		Value Search Function	√	√	√	$\sqrt{}$	V	√	N/A
e Reco	Force Recorder Next	Spring Rate Measurement Module *Only for Force Recorder Next Professional	V	*	V	*	V	*	N/A
		Deflection Correction Function *Only for Force Recorder Next Professional	V	*	V	*	√	*	N/A
		Bending Stress Measurement Module	√	*	√	*	V	*	N/A
		Excel Data Writing Function	V	√	√	√	√	$\sqrt{}$	N/A

<sup>\*:</sup> These functions are downloadable if these products are registered to your account, but they are not compatible with the said products.

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