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High Functionality Model Digital Force Gauge ZTA series

- **-Fast sampling for both Peak Values and Continuous Data, achieving high reproducibility**
- **-Clear OLED display with a variety of significant capabilities**
- **-Measurement benefit increased by external output and practical functions**
- **-Allows easy Data acquisition and management with the included software**
- **-Displacement output (*1)**

*The **ZTA Series** is a high functional model with additional functions added to the specifications of the standard model **ZTS Series**. Please refer to pages 2 - 3 for detailed features.
*1 A test stand with a linear scale and a dedicated cable to input/output displacement are necessary.



ZTA-2N to 1000N



High Capacity Model
ZTA-2500N to 5000N



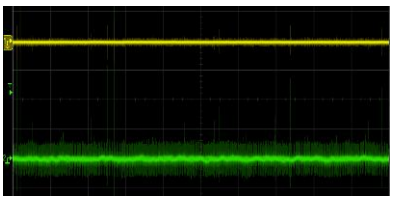
Product Package with
included Accessories

[Evolution to the Next Series]

Next Series is a generic term for IMADA measurement devices with upgraded functions, performances with the essential modifications. The devices enable to install additional functions from the user support site, IMADA-Connected. On the website, related data such as software and instruction manuals can also be downloaded.
New Series: ZTA Series Firmware Ver.5 or later.

New Features

-Increased measurement stability achieved from further noise reduction to the measurement circuit.



Analog output comparison
Yellow: Next series/Green: Old Model

-Force gauge program (firmware) online updates available.

-Various software and additional functions downloadable to increase the measurement conveniences.



IMADA Connected
(https://www.imada-connected.com/)

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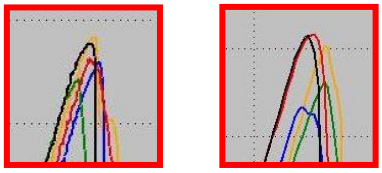
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[Common Features with ZTS series]

Fast sampling for both Peak Values and Continuous Data, achieving high reproducibility

High-speed sampling of up to 2000 times/second updates measured values for more accurate peak-value readings.
By using the optional software sold separately (refer to P.5), graphed as continuous Data with the sampling data of up to 2000 times/second, and even frictional Load changes visualized and evaluated.

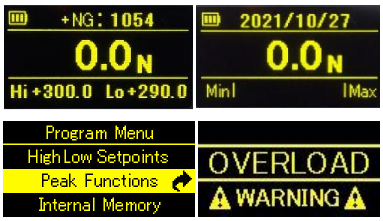
*The Test Results vary depending on the sample and measurement conditions.



Destructive test comparison of the same sample by sampling speed: -
-Left Sampling speed 2000Hz
-Right Sampling speed 100Hz
The less variation shown in the left results

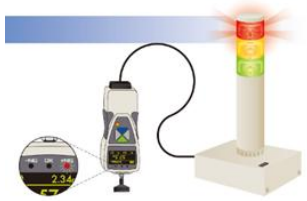
Clear OLED display with a variety of significant capabilities

The OLED provides excellent contrast and high visibility, which reduces errors in reading measurement results.
In addition, the display screen can be divided into three sections, allowing to customize the display contents for liking, such as calendar, bar graph and Comparator setting values on the top and bottom.
In addition, it has various display capabilities such as a multi-language setting menu and overload warning display.



Measurement benefit increased by external output and practical functions

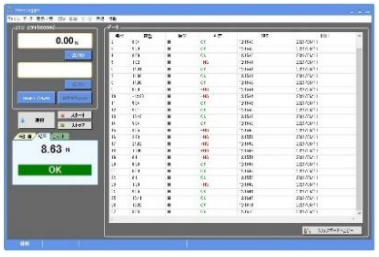
By providing a wide range of data output options such as USB, wireless, serial communication, and analog output, it can be used in a wide range of situations from data management on a PC to interlocking with various devices.
The system used to control external devices, such as stopping the the machine at a specified load value, or to create an inspection device linked to a work process in order to improve the efficiency of the inspection process.



The warning light and other devices may be used to detect measurement abnormalities.

Allows easy Data acquisition and management with the included software

USB Cable and software *Force Logger* included in the original package to proceed with the data management when purchased.
With the software, displayed values and internal memory data stored in a force gauge and continuous data acquired (10 data per second).
It also allows to change and save the Force-Gauge settings from facilitating the management of measurement conditions. (Please refer to P.4 for the system requirements.

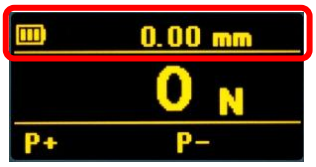


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[Original Features of ZTA series]



(1) Equipped with Displacement Output Function



By connecting with a Test-Stand with the linear scale, the displacement value is shown at the display top.
It is also possible to output the Displacement Data to a PC by using the available software.

Compatible with various displacement meters:
Other than dedicated IMADA Test-Stand, some linear scales of other manufacturers adaptable.
Please refer to page 4 for additional details.

*The FSA Series available as a Package for the load-displacement measurement and data analysis and graphing software.
Please refer to page 6 for more details.

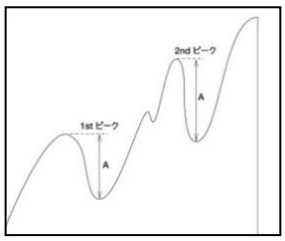
(2) USB flash-drive for Continuous Data Storage

To USB flash-drive (*sold separately)
Continuous data selected:
-1 data/sec, 50 data/sec, 100 data/sec
-Single data (with the button press)
Data saved in CSV format.

Data acquirement is available even without PC

-Different Design for the models 2500N and above
-USB flash-drive sold separately

(3) Display with Special ZTA Features

Value Display Maximum / Minimum	Average Load Value	Peak Value Detection 1st and 2nd Values
 Displays the Max. and Min Load Values from the memory stored in the main unit.	 Calculate the average value of the memory stored in the unit	  When the value drops by more than the arbitrarily set value (A), or more, up to two previous maximum values are detected.
The display convenient for grasping the tendency of measurement results when measuring peak values.		Used to measure samples with click feelings: - Clicking tip of the Mechanical pencil and pens and the Camera Shutter Button.

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[Specifications of ZTA series]

Model	ZTA
Feature	Standard Model with high functionality and usability.
Accuracy	+/-0.2%F.S.+/-1digit
Measurement Unit	N, kgf, lbf (*1)
Display	4-digit Organic EL
Display update	16 / sec
Sampling Rate	2000 data / sec at maximum (*2)
Battery	6.5 hours (2 hours for re-charging) (*3)
Safe overload rating	Approx.200%F.S.
Operating environment	Temperature: 0 to +40 degree Celsius, Humidity: 20 to 80%RH
Function	Customized display (header and footer), Peak hold (tension and compression), Internal 1000 points data memory, Comparator (judgment of OK or NG), Reversible display, Sign inversion, Zero clear timer, +NG alarm, Off timer (auto power off), Dumping, Time display, 1st/2nd peak, Displacement detection at force peak value, Displacement zero reset at selected force, Setting lock
Output	USB, RS232C / ±2VDC analog output (D/A), Comparator 3 steps (-NG/OK/+NG), Overload alarm
Overload warning	Approx.110%F.S. (Warning message and alarm)
External connecting switch	Power ON / OFF / Send and Hold / Zero reset / Peak and Real-time switching
Available linear scales (*4)	- Online driver output (a line receiver according to RS422/485 must be built in.) - Open collector output (Voltage drop between contacts must be smaller than 0.5V.)
Weight	From 2N to 1000N Model: Approx.490g (*5) 2500N, 5000N: Approx.1100g (*5)
Dimensions	Please refer to dimensions.
Accessory	AC adapter, Inspection certificate, CD driver (including data logging software), Attachments (The included attachments vary according to model.), USB cable, Handles (only for ZTA-2500N/5000N), Carrying case, Adaptor for USB flash drive (*6)

*1 The measurement Unit: mN displayed for models of 5N or less, and kN displayed for models of 1000N or more.
In addition, the unit can be displayed as g (for models of 5 N or less) or kg (for models of 20 N or more) as converted values.
*2 Up to 100 data/sec. is saved in USB memory (selectable among 1, 50, and 100 /sec).
*3 The battery is more consumed when connected to USB flash drive or a linear scale.
*4 Some linear scales could not be available even if they meet the mentioned specifications.
*5 The Weight differs according to the model capacity.
*6 USB flash drive is not included.

[Option]

Option	Description	Model
Analog output: RAW	The raw analog data is output without digital processing	-AN

-For this option, add the code (-AN) to the end of the Product Model Number. (Example: ZTS-500N-**AN**)
-This option requires a dedicated cable CB-118 sold separately.
-Data responsiveness is higher than standard analog output (D / A), with the disadvantages of Zero reset disable and high noise components.

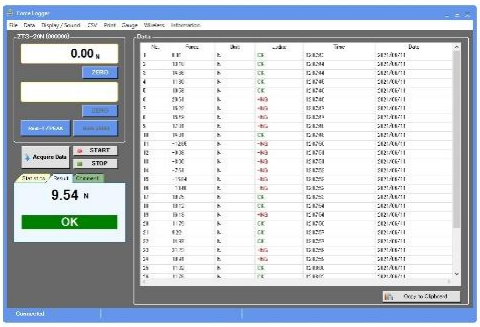
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[ZTA series models]

Model	Capacity	Display	Resolution	Measuring shaft	Included nut
ZTA-2N	2N	2.000N (2000mN)	0.001N (1mN)	M6 P1.0 (Coarse thread) Thread length: 11.6mm	Hexagon nut Material: Resin Height: 5mm
ZTA-5N	5N	5.000N (5000mN)	0.001N (1mN)		
ZTA-20N	20N	20.00N	0.01N		
ZTA-50N	50N	50.00N	0.01N		
ZTA-100N	100N	100.0N	0.1N		
ZTA-200N	200N	200.0N	0.1N		
ZTA-500N	500N	500.0N	0.1N		
ZTA-1000N	1000N	1000N (1.000kN)	1N (0.001kN)		
ZTA-2500N	2500N	2500N (2.500kN)	1N (0.001kN)	M10 P1.5 (Coarse thread) Thread length: 15mm	Hexagon nut Material: Steel Height: 6mm
ZTA-5000N	5000N	5000N (5.000kN)	1N (0.001kN)		

[Included Accessories]

-Force Logger: Data Acquisition Software



Main Functions
-Easy Importing of the Measurement Data
-Display Acquired Data Value Statistics: -Maximum / Minimum / Average Values.
-Data saved in CSV format
-Continuous Data acquisition up to 10 times per second.
-Force-Gauge Function Settings.

Operating environment
- OS: 8.1/10/11
- Hardware: CPU 1GHz or more recommended / Memory 2GB or more recommended / Hard disk 10GB (Data storage area) or more
- Platform: .NET Framework 4.8 or later

-Standard Force-Gauge Attachments (Accessories): For Axis size M6
Force-Gauge Capacity 100N or less: A-Types (Aluminum)
Force-Gauge Capacity 200N - 1000N: S-Types (Steel)

A-1/S-1 *SR-1	A-2/S-2	A-3/S-3	A-4/S-4	A-5/S-5	A-6/S-6	A-7/S-7	A-8/S-8
Small Hook	Disk Tip	Conical Tip	Chisel Tip	Notched Tip	Extension Rod	Large Hook	Y Hook
							
Tension	Compression	Compression	Compression	Compression	Axis Length Adjustment	Tension	Tension

*Small Hook S-1 for Capacity 200N – 500N, and SR-1 for Capacity 1000N.

-High-Capacity Force Gauge Attachments (Accessories) : For Axis size M10
Force-Gauge Capacity 2500N - 5000N: B-Types (Steel)

B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8
Small Hook	Disk Tip	Conical Tip	Chisel Tip	Notched Tip	Extension Rod	Handle	Mounting Bolts
							
Tension	Compression	Compression	Compression	Compression	Axis Length Adjustment	For High Capacity Models	For High Capacity Models

[Related Products]

Downloadable Graphing Software: Force Recorder Next Series *1

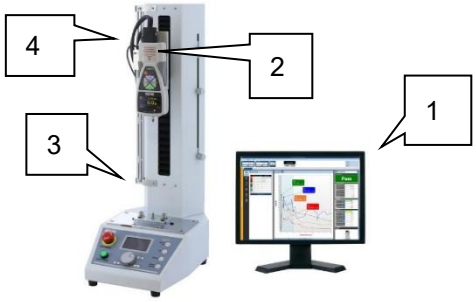


Force Recorder Next Professional

- High sampling rate of max. 2000Hz enables accurate graphing.
  * Professional version is for force-time graphs and force-displacement graphs.
  * Standard version is for force-time graphs.
- Test condition preset functions increase efficiency of recording and analyzing measurement results.
- Various data editing functions such as up to 10-graph overlaying enable analyzing measurement result.
- Adding Images and Comments functions are useful for recording the details of measurement.
- The Print Command allows users to output of measurement data as PDF/Word, Excel, and images and drawing up reports easily.

* A USB flash drive version (Force Recorder Next Standard-FLT / Professional-FLT) compatible with offline installation is also available.
* Please refer to the individual specification sheets for details.

Force- displacement measuring unit: FSA series



FSA-0.5KE2 series

The FSA series is a unit for force-displacement measurement. Also, its high responsivity (2000Hz) offers precise measurement results with a smooth graph of force-displacement.

1. Software Force Recorder (Next) Professional
2. Digital force gauge ZTA series
3. Test stand with a linear scale
4. Cable

*Please refer to FSA series specifications for more details.

Wireless Data Transmit System: WL01 Series



WL01-USB and WL01-ADP

-Wireless communication allows the Data received from remote locations.
-The Data reception detection and interference prevention functions support stable communication.
-The communication format opened to the public and incorporated into the available facilities possible.

Note
-Compatible with firmware Ver3.10 or later.
-Restrictions on the countries and regions for use.
-Please refer to [Wireless System] Specifications for details.

Handle FOH-1 (*2)	Linear scale DMK series	Rechargeable Battery: BP-308
		
Attach to the Force Gauge for firm-hold and stable operation with both hands	Using with a ZTA series to do force-displacement measurement	Rechargeable Battery for replacement

*1 To use this product, user & product registration on IMADA Connected and downloading the software are required. Only Next Series products (For the ZTA series, firmware versions 5.00 or later) are available for the product registration. An Internet connection is required in process of user & product registration and downloading the software.
*2 High-Capacity Type ZTA-2500N/5000N is not mountable. Handles for the high-capacity type is included.

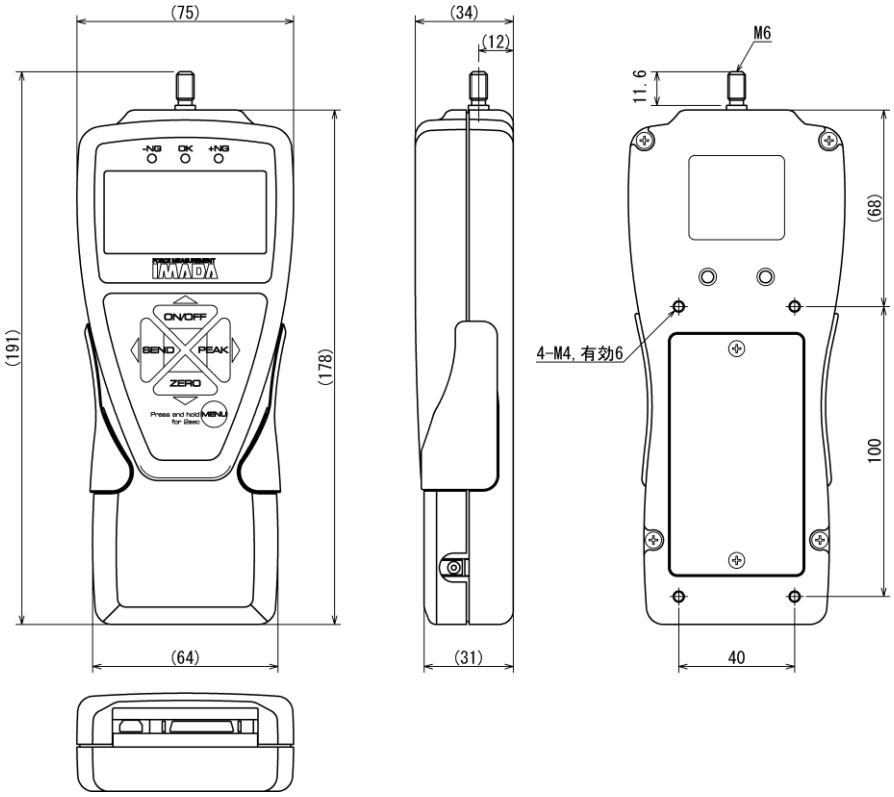
[Cables]

Models	Names	Descriptions
CB-108	Analog Cable	To connect to a multi-meter oscilloscope.
CB-118	Analog cable (For -AN option)	To connect to a multi-meter oscilloscope.
CB-208	RS232C Cable	To connect to a PC having its system
CB-508	Test stand option cable (For MX Series)	To connect to a test stand to enable force control and overload stop functions.
CB-528	Test stand option Cable (for MX2/MX3/EMX/EMX2 Series)	To connect to a test stand to enable force control and overload stop functions.
CB-718	Test stand connection cable for displacement measurement (For MX2-FA/MX3-FA/EMX-FA/EMX2-FA)	To connect to a test stand having linear scale to enable displacement measurement, force control and overload stop functions.
CB-908	Open End Connection Cable	Output cable for loose wire 37 pin (Useful for connection with unique equipment.)

[Other Options]

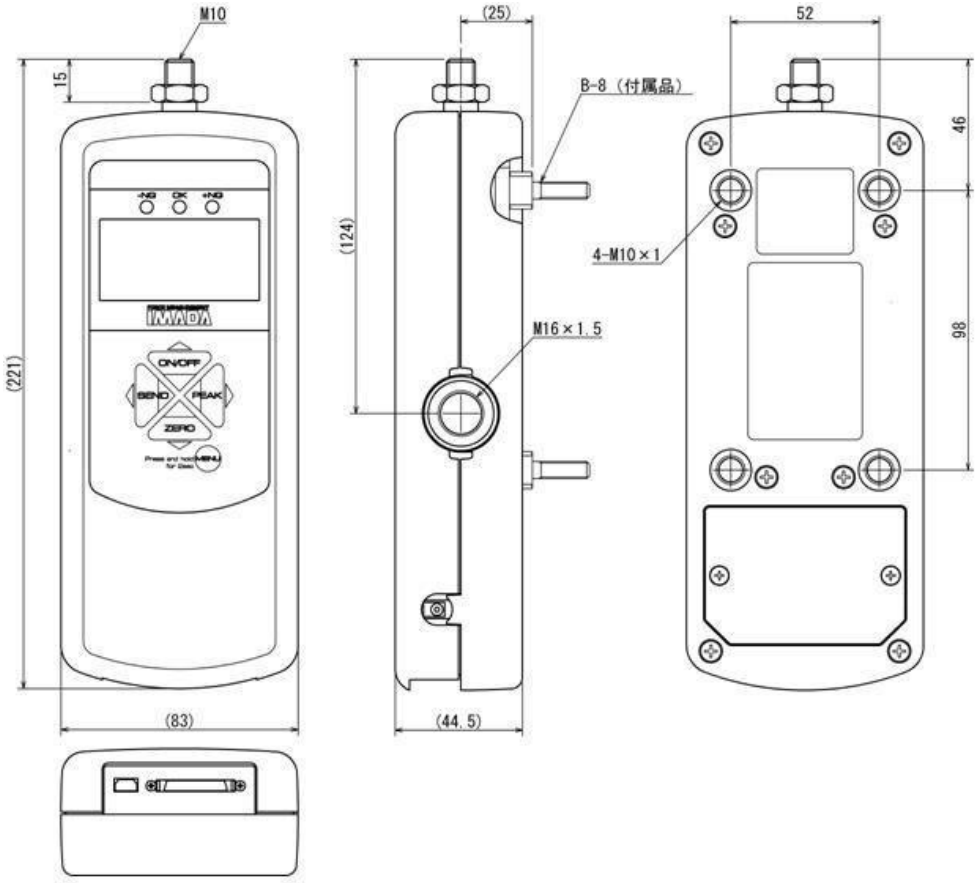
Force gauge ZTS series	Sensor-separate force gauge ZTS/ZTA Series	EZ-Connect series: Sensor-interchangeable Amplifier eZT
		
Standard model of ZTA series which has the same benefit in performance but reduced functionality.	External sensor type for use in the restricted environment (narrow space etc.) or installing into the specific facilities.	The amplifier enables to connect to the various eZ-Connect Series Load Cells.

[Dimensions: 2N to 1000N]



Unit: mm

[Dimensions: 2500N to 5000N]



Unit: mm