eZ-Connect Series: Sensor Interchangeable Amplifier eZT

- Single eZT can be combined with various load cells, enabling you to handle a wide range of force testing applications such as compression, tension, and torque due to its interchangeability.　NO adjustment is required to change load cells.
- You can select a load cell from almost 70 kinds such as compression, tension, torque, waterproof, wide temperature range, and more.
- You can keep spare load cells in preparation to breakdown of the load cell.

[Features]

eZ-Connect series
Load cell

Connecting

Amplifier
eZT

1. Measure things from load to high load

You can perform measurement different in capacity.

<Load cell eDPU series>

2N　　　　　　50N　　　　　　500N

2. Handle a wide range of force testing

You need one eZT only to multiple load cells due to its interchangeability.

Torque　　　　For Brake pedal　　　Compression /Tension

3. Keep a spare sensor to reduce risks in operation

You can reduce the risk to stop a working line
by preparing another sensor as a spare for everyday tests.

Load cell gets broken by overloading.　　　You can replace it to the spare immediately.

The accuracy adjustment is NOT REQUIRED to change sensors.

＊Please calibrate the sensor and amplifier (confirm the displayed values are correct or not.) before using it. We also provide the calibration service(Pleaser refer to page 2).

[Interchanging the load cells]

1	2	3
A load cell is connected.	Just disconnect it and connect another.	Ready for the next measurement

[Wide Range of Testing Applications]

eZT can handle a wide range of force testing applications to fit various needs.

Handheld use	Use as a force tester
Handheld use, combined with a handle	As a force tester, combined with a test stand
E.g. Mount the handle LTH-T to eDPU We also offer other handles for handheld use.	You can combine various sensors and attachments to fit various measurement needs. E.g. Mount a load cell to a test stand and perform90 degree peel test of adhesion tape.

*Please feel free to contact us when you purchase it. (+81-(0)532-33-3288).

[Cautions]

1. Accuracy

Overall accuracy is calculated as the total of the accuracy of amplifier (+/- 0.2%F.S.) and load cell (see each specification sheet):

For example… eDPU-50N

Amplifier (+/-0.2% F.S.) + eDPU (+/-0.2% F.S.) = Overall accuracy +/-0.4% F.S.

* For measurement requiring higher accuracy, there are 'Separate Sensor Model ZT series' and 'Desktop Force Amplifier FA Plus', which are calibrated individually to each load cell. Please refer to the specification sheet of Separate Sensor Model ZT series.

2. Accuracy Warranty
Please calibrate before using eZ-Connect series.
The amplifier is not calibrated with any load cell.
Please request calibration for each combination and calibration report if required (available at a charge).

*Please contact us for details of our calibration service (+81-(0)532-33-3288).

IMADA CO.,LTD.
FORCE MEASUREMENT
IMADA

eZ-Connect Series: Sensor Interchangeable Amplifier eZT

[Specifications of eZT]

Model	eZT
Accuracy	+/-0.2%F.S. (*1)
Unit of measurement	Depends on load cell and settings (N, kN, kgf, lbf N-m, N-cm, kgf-m, kgf-cm, lbf-in, ozf-in)
Display	4-digit
Display update	16 / sec
Sampling rate	2000 data / sec at maximum (*2)
Battery	8 hours (2 hours charge) (*3)
Operating environment	Temperature: 0 to +40 degree Celsius, Humidity: 20 to 80%RH
Functions	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, Mitutoyo digimatic (*4), 2 VDC analog output (D/A), Comparator 3 steps (-NG/OK/+NG), Overload alarm, Sub comparator 2 steps (output of large or small judgment), USB flash drive, Displacement.
Overload warning	Approx.110%F.S. (Warning message and alarm)
External connecting switch	SEND (a point of contact holding), Zero reset, Peak ON/OFF setting
Available liner scales (*5)	- 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	Approx. 490g
Dimensions	Please refer to dimensions.
Accesoories	AC adapter, CD driver (including simple software for data logging), Force Recorder Professional (Trial ver.), USB cable, Carrying case, Adaptor for USB flash drive (*6)

*1 The accuracy of load cell is added when using connected with a load cell.
*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 Not always available for Mitutoyo digimatic products.
*5 Some linear scales could not be available even if they meet the mentioned specifications.
*6 USB flash drive is not included.

Accessory

Data logger software: ZT-Logger		
	Main function □Peak value collection(*1) □Continuous data collection (10 data/sec)(*1) □Stored data recalling(*1) □Saving as CSV file □Report printing	**Operating Environment**(*2) □OS:Windows XP/Vista/ 7/8/8.1(32bit/64bit) □CPU:1GHz or more □Memory:1GB or more □Hard disk:2GB or more □.NET Framework4 or more
	*1 Collecting data: Force/Displacement(Test stand with displacement output function is required)/Time *2 It may not work under peculiar environment.	

Do you have any requests like mentioned below?

1.Controlling external equipment according to load value. (e.g. To stop or change operation of machine at a selected load value.)

2.Adding a certain load value. (e.g. To maintain sample pressed at a chosen load value.)

3.Producing inspection device synchronized with work process. (e.g. To improving efficiency of inspection process.)

4.Finding inferior goods earlier with OK/NG judgment function.(e.g. To do quality control thoroughly)

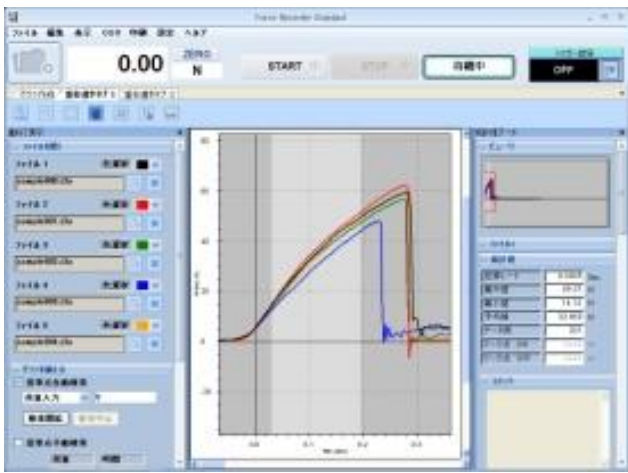→Please contact us for detail. Our service gr: +81-(0)532-33-3288

FORCE MEASUREMENT IMADA

[eZ-Connect series Load Cells]

eZ-Connect Model	eDPU series	eSW series	eLMU series	eLU series	eSK series
Image					
Feature	Standard - Wide Use	Water-proof	Small Size	Small Size - Wide Use	High accuracy
Force	Tension /Compression	Tension /Compression	Tension /Compression	Tension /Compression	Tension or Compression
Capacity	2N to 20kN	100N to 20kN	50N to 500N	50N to 2000N	2000N〜20kN
Accuracy	+/- 0.2%F.S.	+/- 0.5%F.S.	+/- 1%F.S.	+/- 1%F.S.	+/- 0.25%F.S.
Cable Length	Up to 500N:2m 1000N to 20kN:3m	Up to 5000N: 0.5 to 2m (Curl cord) 10kN and 20kN:5m	2m	3m	5m

eZ-Connect Model	eLM series	eLC series	eDD2 series	ePN series	eZD series
Image					
Feature	Thin & Round	Round & Precise	High Accuracy & Water-proof	Pen type	Small Size - High capacity
Force	Compression	Compression	Compression	Tension /Compression	Tension or Compression
Capacity	10N to 20kN	500N to 20kN	5000N to 20kN	50N	1000N to 20kN
Accuracy	Up to 10kN:+/- 2.0% F.S. 20kN: +/-3.5% F.S.	+/- 0.5%F.S.	+/- 0.5%F.S.	+/- 2% F.S.	+/- 0.5%F.S.
Cable Length	Up to 2000N: 2m 5000N to 20kN: 3m	5m	5m	2m	3m

eZ-Connect Model	eZU series	eZW1-10kN	ePK2-1500N	eDM-2000N	eHT series
Image					
Feature	Rod ends are attached	Crane scale type	For car foot brakes	For door	Torque Load Cell
Force	Tension	Tension	Specialized	Specialized	For torque
Capacity	10kN~20kN	10kN	1500N	2000N	0.5Nm~10N-m
Accuracy	+/- 1% F.S.	+/- 1% F.S.	+/- 1% F.S.	+/- 2% F.S.	+/- 0.5% F.S.
Cable Length	5m	0.5 to 2m	1.5m	2m	0.5 to 1m (Curl cord)

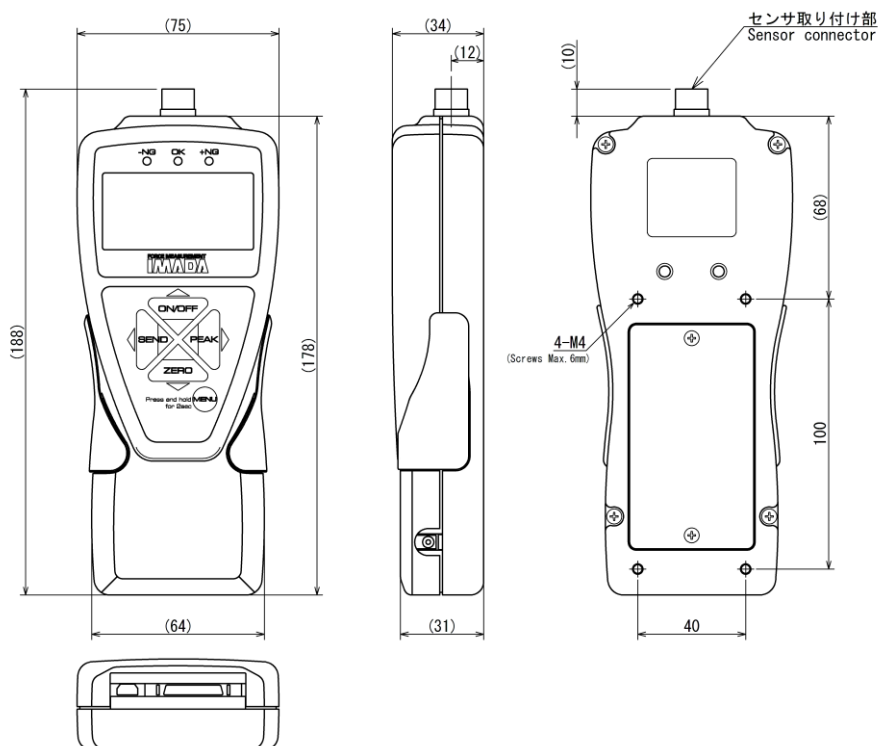* Please refer to each specification sheet for details.

[Related Products]

Graphing Software: Force Recorder			

*This image is from Standard ver.

You can make graphs at real time via USB connection at 2000Hz. There are 3 grades available:

Main Functions	Professional	Standard	Light
Drawing force-time graph (Max. sampling 2000 times/ sec.)	○	○	○
Force gauge function settings	○	○	○
Saving in CSV format	○	○	○
Overlaying graphs (5 graphs)	○	○	
Drawing force-displacement graph	○		

* Professional version is designed to be used with ZTA and a test stand with liner scale.

* Please refer to each specification sheet for details.

Sensor-separate force gauge ZTS/ZTA series	Printer: DP-1VR	Battery: BP-308
Broad line-up of sensors enables measurement in various environments with its high accuracy and repeatability□	Prints indicated values and data in internal memory. *CB-308 cable is necessary.	Battery for replacement.

[Related Cable]

Model	Explanation	Purpose of use
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 own system
CB-308	Digimatic cable	To connect to a printer DP-1VR
CB-508	Test stand option cable (For MX)	To connect to a test stand to enable force control or overload prevention functions.
CB-518	Test stand option cable (For MX2,EMX)	To connect to a test stand to enable force control or overload prevention functions.
CB-718	Test stand connection cable for displacement measurement (For MX2-FA)	To connect to a test stand having length meter to enable force-displacement measurement.
CB-728	Test stand connection cable for displacement measurement (For EMX-FA)	To connect to a test stand having length meter to enable force-displacement measurement.
CB-908	Open end connection cable	Output cable for loose wire 37 pin (Useful for connection with unique equipment.)

[Dimensions]

*Please refer to load cell's specification sheet for each dimensions.

[Cautions]

- The contents may be changed without previous notice.
- All of products are designed for measurement purpose only.
- Do not copy and use this content without authority.
- Please note that the capacity is dependent on the displayed unit. Please contact us for details.

Please feel free to contact us if you have a question for force measurement (+81-(0)532-33-3288).