

## Digital Torque Gauge HTGS/HTGA series

Handheld torque measurement instrument for wide applications  
Changeable attachments expand application possibility  
High usability with bright display and various functions



Left: HTGA

Below: Accessories software ZT-Logger



Torque measurement of rotary switch

Precise measurement	High usability	Easy data management
<ul style="list-style-type: none"> <li>- Fast sampling rate 2000 Hz capture torque transition</li> <li>- Small influence of bending and slant force by double bearing structure</li> </ul>	<ul style="list-style-type: none"> <li>- High bright organic EL display</li> <li>- Multi language set up menu of English, Spanish, French, Chinese, German, Italian, Korean, Japanese</li> </ul>	<ul style="list-style-type: none"> <li>- Easy connection with PC by USB</li> <li>- Data download software is included</li> <li>- Optional software which is making a graph is available.</li> </ul>

### Replaceable attachment

Easy operation of changing attachments.



Prepare an attachment



Insert an attachment



Turn screw by attached L wrench

You can change the attachment according to a sample.

We offer custom made attachment for unique application.

\* Attachments are not included HTGS/HTGA series.

## [Specifications]

We have 2 models of torque gauges.

Model	HTGA	HTGS
Outline	Advanced model with various functions such as data saving in USB memory stick, angle(displacement) I/O and more.	Standard model
Accuracy	±0.5%F.S.±1digit	
Unit of measurement (*1)	N·m, N·cm, kgf·m, kgf·cm, lbf·in, ozf·in	
Display	4-digit Organic EL	
Display update	10 / sec	
Sampling rate	2000 data / sec at maximum (*2)	
Battery	8 hours (8 hours charge) (*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 (clockwise and counter-clockwise), 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, Angle detection at torque peak value (*4), Angle zero reset at selected torque(*4)	-
Output	USB, RS232C, Mitutoyo digimatic (*5), 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, Angle(displacement) (*4)	-
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	
Weight	Display : approx.490g	
Dimensions	Please refer to dimensions.	
Accessory	AC adapter, Inspection certificate, CD driver (including simple software for data logging), , USB cable, Carrying case, L wrench, handles (10N·m range only)	
	USB flash drive adapter (*6)	-

\*1 These are the specifications for International model. Please note that this unit is different from Japanese domestic model and international one.

\*2 The recording rate to USB flash drive is maximum 100Hz.

\*3 The battery is more consumed when connected to USB flash drive or a displacement scale.

\*4 Angle(displacement) scale is necessary to valid this function.

\*5 Not always available for Mitutoyo digimatic products.

\*6 USB flash drive is not included.

## [HTG series models]

Model		Range	Display	Resolution
HTGA-2N	HTGS-2N	2 N·m (200N·cm)	2.000N·m (200.0N·cm)	0.001N·m (0.1N·cm)
HTGA-5N	HTGS-5N	5 N·m (500N·cm)	5.000N·m (500.0N·cm)	0.001N·m (0.1N·cm)
HTGA-10N	HTGS-10N	10N·m (1000N·cm)	10.00N·m (1000N·cm)	0.01N·m (1N·cm)

[Option attachment]

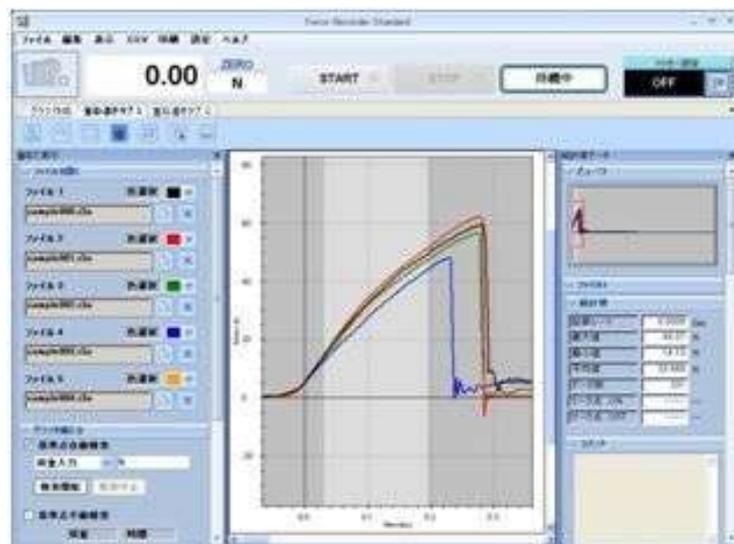
Expand the usage with various attachments			
			
<b>Pin chuck</b> Suitable to fix shaft and rod type samples	<b>Socket holder</b> Suitable to fix torque wrench	<b>Torque driver</b> Suitable to measure tightening and losing torque	<b>M10 adapter</b> Adaptable for M10 female attachment
<b>Large pin chuck</b> Model : HT-DC-13 Opening width : $\phi$ 1.2~13mm Weight : approx. 600g *Cannot be used with 2N·m range	<b>Socket holder</b> Model : HT-9.5SQ Socket : 9.5mm square Weight : approx. 100g	<b>Torque driver</b> Model : HT-DBH Bit : + : No.1×50 + : No.2×50 - : No.3×50 Weight : approx. 100g	<b>M10 adapter</b> Model : HT-AD-M10 Screw : M10×L20 Weight : approx. 50g
<b>Standard pin chuck</b> Model : HT-DC-6.5 Opening width : $\phi$ 0.5~6.5mm Weight : approx. 200g			
<b>Small pin chuck</b> Model : HT-DC-4 Opening width : $\phi$ 0.5~4mm Weight : approx. 100g			

[Accessories]

Data logger Simple software ZT-Logger	<b>Main Functions</b> <ul style="list-style-type: none"> <li>- Captures peak data</li> <li>- Captures continuous data (10 data /sec)</li> <li>- The recall of memory data</li> <li>- Saves data in CSV format</li> </ul>	
	<b>Working Environment</b> <ul style="list-style-type: none"> <li>* Available data: Torque, Angle, Time</li> <li>- OS: Windows XP/Vista/7/8(32bit/64bit)</li> <li>- CPU: more than 1GHz</li> <li>- Memory: more than 1GB</li> <li>- Hard disk : more than 2GB</li> <li>- .NET Framework4 later</li> <li>* Please note that the software may not work in all environmental combinations.</li> </ul>	
Graphing software Trial version  Force Recorder Professional Trial Edition  Trial limit is 30days after installation.	<b>Main Functions</b> <ul style="list-style-type: none"> <li>- Making a graph with 2000Hz sampling speed</li> <li>- Function to input memo to record information</li> <li>* Some functions are limited with trial edition. Please refer specification of Force Recorder for the detail of functions.</li> </ul>	
	<b>Working Environment</b> <ul style="list-style-type: none"> <li>- OS: Windows XP/Vista/7/8(32bit/64bit)</li> <li>- CPU: more than 1GHz</li> <li>- Memory: more than 1GB</li> <li>- Hard disk : more than 2GB</li> <li>- .NET Framework4 later</li> <li>* Please note that the software may not work in all environmental combinations.</li> </ul>	

[Related products]

**Graphing Software: Force Recorder**



**Main functions**

- You can make graphs of force-displacement at real time via USB connection at 2000Hz.
  - 5 graphs at maximum can be overlaid. (Standard, Professional edition)
  - You can write memo on each graph. You may write down testing conditions such as testing speed.
- \* 3 editions are available as Light, Standard, and Professional.  
\* Please refer to each specification for further information.

**Printer : DP-1VR**



**Option cable**

- Analog(3m) : CB-108
- RS232C Cable (3m) : CB-208
- Digimatic cable(3m) : CB-308
- Contact point cable (3m) : CB-808
- Open end cable (3m) : CB-908

**Replacement battery : BP-308**



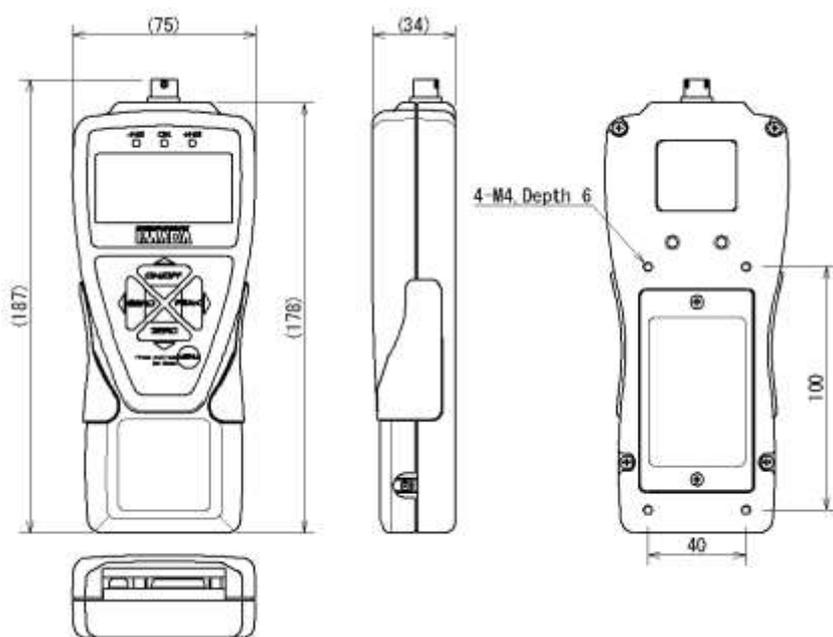
Prints indicated values and data in internal memory. \*CB-308 cable is necessary.

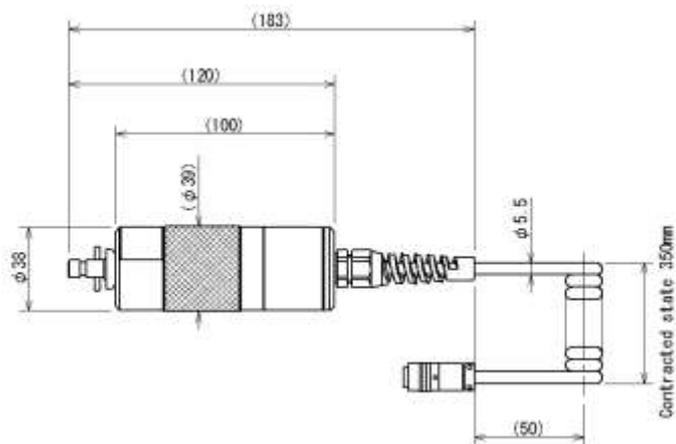
Various cables are available.

Battery for replacement.

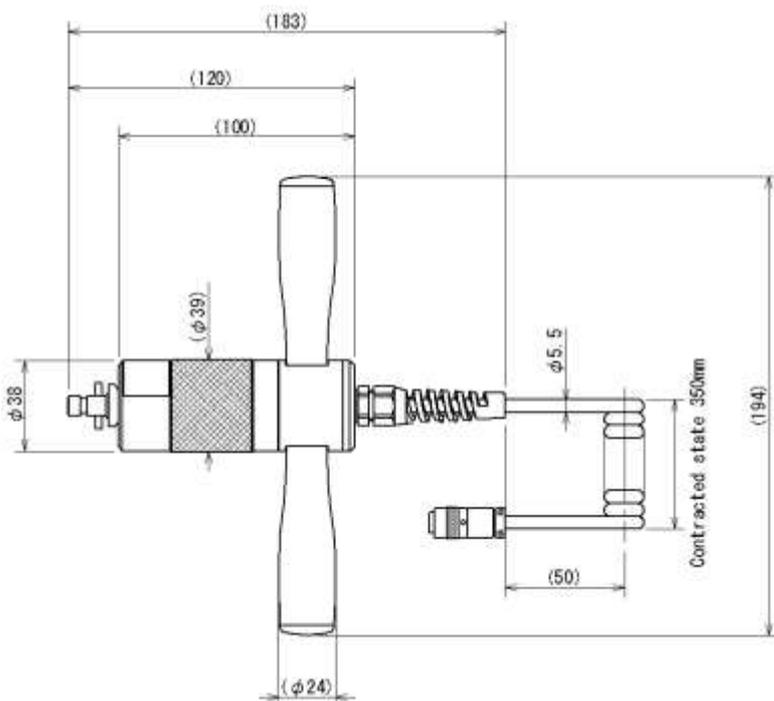
[Dimensions]

Display





Sensor : 10N



**[Calibration Certificate]**

- We offer calibration certificate with extra charge.
- \* Please contact us or our distributor in your country for further information.

**[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 if you add load over capacity, its sensor would be broken down.