

NEW

Torque waveform
& wireless
communication

HIOS®

DIGITAL TORQUE METER HP SERIES



Torque Meter HP Series

HP-10

Sensor module
Max torque 1.000N · m

HP-100

Sensor module
Max torque 10.00N · m



HIOS's torque meter is one of the world's standards.

In 1970, when the concept of torque management still didn't exist, we developed the world's first electric screwdriver for industrial use which was capable of precise torque control through current control by dialing. In 1977, the company introduced an autoclutch screwdriver that automatically controlled accurate torque. This product led our technical innovation. In the next year, we began developing a torque meter to improve screw fastening quality control. The mechanism of the Fidaptor was developed by us to reduce the effect of inertia during torque measurement of a clutch type electric screwdriver and to enable accurate torque detection. Standards for screw fastening quality control have been established that led new innovations. Torque meters are currently used at manufacturing sites in more than 90 countries around the world.



Newly Born

HP SERIES

| MADE IN JAPAN

Sending and receiving data wirelessly

This instrument is the first to feature the measured torque data transfer as standard in the series. Data can be transferred by wireless or cable connection, and that led improvement in usability.

Highly visible display

The large display clearly shows the measured torque value and waveform, ensuring high visibility in a bright environment.

Evolution of measurement modes

The continuity of the measured torque is graphically displayed in a waveform, making it easier to visually see changes in torque.

Remote operation from an external device

The mode and threshold can be changed from an external device, allowing more convenient and efficient operation.

Safe torque control

Features a PASS/Fail judgment function to judge the measured torque value. It supports daily quality control tasks in a production line such as screwdriver torque adjustment and setting.

Data collection with specialized applications

Provides applications that facilitate torque management data collection in a production site. Supports productivity improvement, predictive maintenance, and quality traceability.

NEW

HP-10

Sensor module
Max torque 1.000N • m



NEW

HP-100

Sensor module
Max torque 10.00N • m



Torque of various tools such as electric screwdriver can be checked with high accuracy. You can also

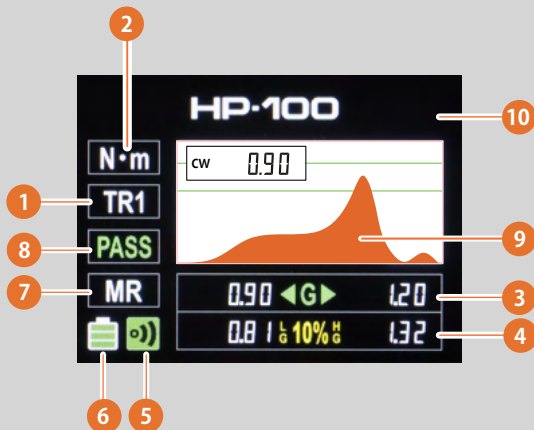
function 01

NEW

Display

The torque measurement value is displayed in waveform, and the PASS/FAIL judgment setting can also be visually checked on the display. The measured value, work rate, torque value, etc., are displayed in an easy-to-see way, supporting the improvement of work efficiency.

Large
3.5 inch
display



function 02

1 Measurement mode

NEW

TR1 (Torque waveform)

Fluctuations in the torque from the start to the end of measurement are displayed in a waveform, and the maximum torque value is displayed as a fixed numerical value. When the load is out of the measurement range, the measurement is terminated.

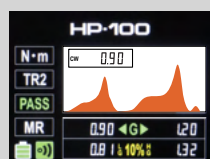
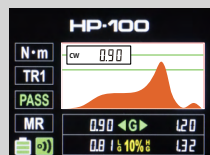
NEW

TR2 (Continuous torque waveform)

The value of the load applied to the detector is displayed. Even if the load is outside the measurement range, the waveform data can be measured continuously. You cannot use PASS/Fail judgment.

PEAK

The highest actual measured value (peak value) during measurement is displayed. When CCW is selected, a minus sign is displayed.



function 03

2 Unit

You can choose from two types of units and switching between them is easy.

NEW

3 PASS/Fail judgment threshold

Reference values for judging the PASS/Fail of the measured peak value are displayed.

NEW

4 Acceptable range for PASS/Fail judgment

Sets the acceptable range to the numeric value set by the PASS/ Fail judgment threshold.

5 Buzzer

Displays the status of the buzzer sound such as to-bechecked or warning tone.

NEW

6 Battery

Displays the device's battery level or charging status.

vers, torque screwdrivers, and torque wrenches easily collect and analyze measurement data.



Recommended for daily inspection and approval Measurement data output



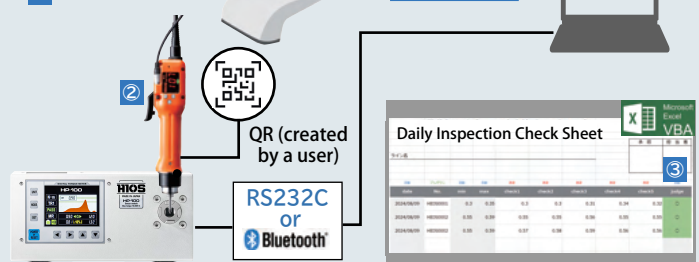
Measurement data can be transferred to a PC or control device. A variety of connection methods such as wireless communication, USB connection, etc., are supported for various usages. In addition, the unit settings can be operated from an external control device. Flexible system linkage contributes to efficiency and automation of work.

- The measured value is recorded in the inspection table as it is in Excel format automatic record + inspection approval column.
- Paperless inspection and more efficient operations

Connection method: Bluetooth/USB/RS-232C (optional) Supported OS: Windows 10/Windows 11

《Use Case》

① QR Code Reader



- ① Automatic input of control ID and torque information embedded in QR
- ② When torque is measured by the detector, the measured value is automatically recorded in the blank field.
- ③ When the specified number of measurements are completed, the judgment result is automatically displayed.

function 04

NEW

⑦ Auto reset mode

Auto reset mode is displayed. The display is automatically reset and the data is sent when the set time elapses after the measurement is finished.

NEW

⑧ PASS/Fail judgment result (PASS/FAIL)

Displays the judgment result of the measured value based on the PASS/Fail judgment threshold.

NEW

⑨ Torque waveform display

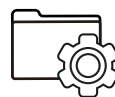
The continuity of the measured torque can be visualized with a waveform for a more intuitive understanding.

NEW

⑩ Auto power off mode

The screen saver starts automatically after a certain period of inactivity. After a certain amount of time elapses, the device enters auto power off mode, which automatically turns off the power.

Remote Configuration & CSV Export Data Collection & Storage

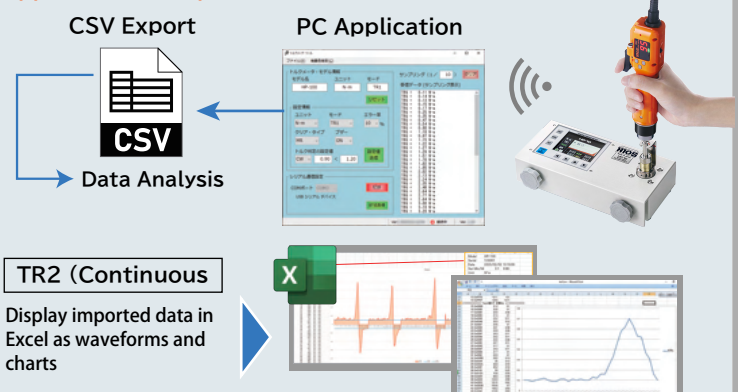


Measurement data can be transferred to a PC and easily collected and stored through the application. Data can also be exported in CSV format for evaluation and analysis.

- Save measurement data in CSV format and remotely configure device settings from a PC
- Traceability support allows easy access to historical data at any time

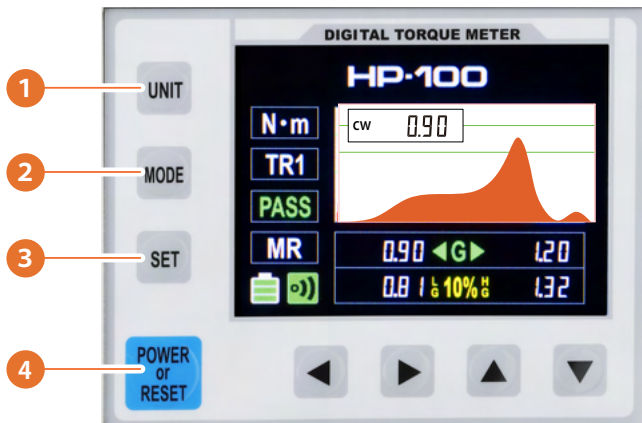
Supported OS: Windows 11 (English Version Only)

《Application Example》



Names and functions of the operation panel

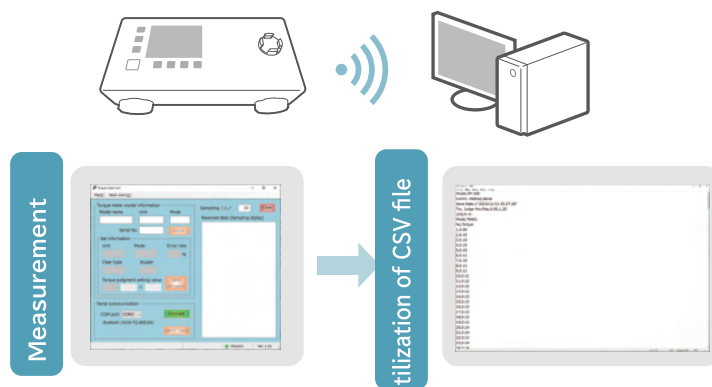
In addition to the highly visible and easy-to-operate large display, the PASS/Fail judgment, more battery capacity, and various functions are newly featured, leading dramatic improvement in work efficiency. The ease of use and functionality have improved more than ever - now it proposes new work style.



- 1 **UNIT** Possible to change measuring unit as below according to your needs.
- 2 **MODE** The measurement mode can be easily switched between PEAK (peak), TR1 (waveform), and TR2 MODE (continuous waveform).
- 3 **SET** Various functions such as buzzer sound setting, automatic data transmission setting, PASS/Fail judgment setting, etc., can be set to improve work efficiency.
- 4 **POWER or RESET** Turns on the power and sends measured data. There is also an auto reset mode that automatically sends data without pressing a button.

External output

Connects the measurement data by wireless or wired connection to an external device and transfers the data.

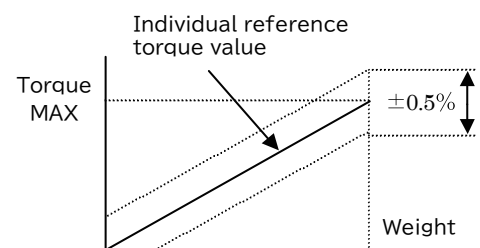


Communication setting parameters

Item	Baud rate	Data length	Strip bit	Parity	CTS/RTS-control	Format	Delimiter
Comm. parameters	115,200 bps	8 bit	1 bit	none	none	ASC II	LF

Measurement accuracy

HIOS's torque meter achieves high accuracy within $\pm 0.5\%$ on F.S. (full scale). Each torque meter obtains the highest measurement value among the four-point test values. This assures reliable quality.



Specifications

Model name		HP-10		HP-100	
					
Interface		Bluetooth (Standard)	RS-232C (Optional)	Bluetooth (Standard)	RS-232C (Optional)
Meas. range	N•m	0.015-1.000		0.15-10.00	
	N•cm	1.5-100.0		15-1000	
	lbf • in	0.15-9.00		1.5-90.0	
	kgf • cm	0.15-10.00		1.5-100.0	
Min. display unit		10digit ※1			
Meas. mode		PEAK, TR1 (torque waveform), TR2 (continuous torque waveform)			
Meas. direction		Right-hand screw, left-hand screw			
Meas. accuracy		Within ±0.5% (F.S.)			
Charging and scalability		Supports the following with a micro USB Type-B port: • Charging • Data transfer (USB 2.0: up to 480Mb/s)			
b p a o t t e r y & y	Input	AC100-240V 50/60Hz 0.4A			
	Output	DC5V 2A 10W			
	All models are equipped with 1000 mA Ni-MH battery 3.6 V (operating voltage 3.3 V), maximum 300 mA when the power is ON				
	Torque meas & data transmission	Up to 2.5 hours			
		Charging via power adapter or PC via USB port			
	Charging time	5 hours			
	Charge cycles	500			
Power consumption		Max. 1.5 W or less		*The value may vary depending on the operating environment and conditions.	
Size (W x D x H)		230 x 110 x 50 mm (excluding the largest protrusion) *For more information, download the DXF file from the website.			
Weight		1.94kg			
Operating environ ment	Temperature	15~35℃			
	Relative humidity	25-65% (no condensation)			
Accessories		Device, USB cable, AC adapter, Fidaptor, case, Inspection Certificate, certificate3-item (Inspection Certificate,Calibration,Traceability chart)			
				HIOS Bit Drive Type Only: grease, threaded shaft and Fidaptor spring	

※1 About digit The digit is displayed without decimal point. [Examples] 0.001=1 digit, 0.025=25 digit, 0.10=10 digit, 1.25=125 digit

Order Codes

Model	measuring unit	Order Codes <HIOS Drive>	
		Bluetooth	RS232C
HP-10	NN	HP-10-NN-R3	HP-10-NN-R3-W
	NL	HP-10-NL-R3	HP-10-NL-R3-W
	NK	HP-10-NK-R3	HP-10-NK-R3-W
	KL	HP-10-KL-R3	HP-10-KL-R3-W
HP-100	NN	HP-100-NN-R3	HP-100-NN-R3-W
	NL	HP-100-NL-R3	HP-100-NL-R3-W
	NK	HP-100-NK-R3	HP-100-NK-R3-W
	KL	HP-100-KL-R3	HP-100-KL-R3-W

Model	measuring unit	Order Codes <1/4 HEX Drive>	
		Bluetooth	RS232C
HP-10X	NN	HP-10X-NN-R3	HP-10X-NN-R3-W
	NL	HP-10X-NL-R3	HP-10X-NL-R3-W
	NK	HP-10X-NK-R3	HP-10X-NK-R3-W
	KL	HP-10X-KL-R3	HP-10X-KL-R3-W
HP-100X	NN	HP-100X-NN-R3	HP-100X-NN-R3-W
	NL	HP-100X-NL-R3	HP-100X-NL-R3-W
	NK	HP-100X-NK-R3	HP-100X-NK-R3-W
	KL	HP-100X-KL-R3	HP-100X-KL-R3-W

*measuring unit: [NN]→N•m⇔N•cm [NL]→N•m⇔lbf•in [NK]→N•m⇔kgf•cm [KL]→kgf•cm⇔lbf•in

Fidaptor

Applicable models / HP-10

P/N:TF4G-Z

Measurement range:
0.15-0.6 N•m (yellow)
HIOS Shank H4



P/N:TF6SG-Z

Measurement range:
0.15-0.6 N•m (yellow)
Hexagonal Shank (2-step shaft)
Upper: 5HEX, lower: 1/4 HEX



P/N:TF4SG-Z

Measurement range:
0.25 N•m or smaller (red)
HIOS Shank H4



P/N:TF4S-Z

Measurement range:
0.25 N•m or smaller (red)
HIOS Shank H4
Without safety protection cover



Applicable models / HP-100

P/N:TF5G-Z

Measurement range:
0.5-3 N•m (black)
HIOS Shank H5



P/N:TF6XG-Z

Measurement range:
0.5-3 N•m (black)
Hexagonal Shank 1/4 HEX



P/N:TF6U-Z

Measuring range:
for high torque screwdriver
measurement: 3-9 N•m (black)
Hexagonal Shank 1/4 HEX
Without safety protection cover



P/N:TF6UP-Z

For CL-9000NL
Measurement range:
3-9 N•m (black)
HEX Shank 1/4HEX
Without safety protection cover



For automotive industry Soft joint type

NEW

Recommended for measurements of
high-torque, high-rotation tools and
fastening to elastic parts.

P/N:TF5J-006N-HEX

Measurement range:
1.0-6.0 N•m
Hexagonal Shank 1/4HEX



P/N:TF5J-006N

Measurement range:
1.0-6.0 N•m
M8 Hexagonal socket head cap screw



HIOS Inc.

Head Office 1-35-1 Oshiage, Sumida-ku, Tokyo, 131-0045, Japan Phone: +81 (Japan) 36661-8828

Osaka Office Naniwasuji SIA building 18F, 2-4-2, Shinmachi, Nishi-ku, Osaka City, Osaka Prefecture, 550-0013, Japan Phone: +81 (Japan) 6 6533-0903

Nagoya Office Kirix Marunouchi Building 9F, 1-17-19 Marunouchi, Naka-ku, Nagoya City, Aichi Prefecture, 460-0002, Japan Phone: +81 (Japan) 52 219-5566

Yamagata Plant 5 Takagi, Yamagata City, Yamagata Prefecture, 990-2346, Japan Phone: +81 (Japan) 23 645-8100

HIOS (SHENZHEN) Co., LTD. Technical Service Center and Show Room 1302, Block B, Sunshine Science and Technology Innovation Center,
Nanxin Rd, Nanshan District, Shenzhen China 518000 Phone: +86 (China) 755-26674278

○ Please note that some of the specifications and appearance of the products may be changed for improvement without prior notice.

○ It is strictly prohibited to copy and use this product catalog without permission.

○ Information in this document is the latest as of July 2026 ○ Catalog No. TRQE-26B



<https://hios.com>