



# ONO SOKKI-OVERSEAS COMPANY PROFILE

Ono Sokki has been manufacturing digital instruments since the word "digital" was not popular at all. "Do what others do not do" is the words describing Ono Sokki spirit very well. The measurement technology has been contributing technological evolution of modern industries, and now it is also a key element to realize comfortable environment for human being. Ono Sokki is one step ahead providing tools and solutions to create better quality of both industry and human life.



# PROGRESSIVE

As a company specializing in measurement, control and information-handling technologies, Ono Sokki plays an active role in the global development of both basic and leading-edge industries, such as the automobile, shipbuilding, aeronautical, machinery and electronics industries. Ono Sokki also offers technologies and products that serve as key solutions for various needs relating to environmental issues and energy conservation. We at Ono Sokki are dedicated to meeting the needs of users from not just these, but a variety of industry sectors, by developing total system solutions which make use of our sensing, metering, data-processing and precision-machining technologies. This strategy of continually adding value to our products is what keeps Ono Sokki progressive and one step ahead of the competition.

Head Office



Acoustic Laboratory



Automotive Testing Laboratory



Yokohama Technical Center



Utsunomiya  
Technical & Product Center



Automotive Testing Laboratory  
Utsunomiya I & II





# LEADING PRODUCTS

## Rotation and Torque Measurements

### DIGITAL HANDHELD TACHOMETER (HT series)

Both contact and non-contact types are available. Each type is small size and light weight. Very handy for speed measurements.



## Automotive Related

### CHASSIS DYNAMOMETER FOR VEHICLES

This is a space-saving chassis dynamometer system for 4-wheeled vehicles with a dynamometer placed between the world standard  $\phi 48$  inch rollers. Various tests such as emission tests can be performed.



### CHASSIS DYNAMOMETER FOR MOTORCYCLES

The chassis dynamometer system for motorcycles allows you to select the electrical inertia method in addition to the mechanical inertia method. Equipped with applications according to test purposes such as exhaust gas test, endurance test, performance test etc.



### DIGITAL TACHOMETER (TM series)

New digital tachometers pursued high accuracy and high response by integrating a multi-function tachometer, reversible counter, passing time/passing speedometer while maintaining the functions and performance of existing models.



### ADVANCED TACHOMETER (FT series)

FFT computing type, small size and light weight. Measures rpm of a rotating shaft without any marker attached on, or even if the shaft itself is not come out.



### ROTATION DETECTOR (MP series) (LG series)

You can select sensors with external or built-in detection gear type. MP-9810 (Basic type): 0 Hz to 20 kHz MP-9830 (High speed type): 0 Hz to 100 kHz

Compact and all-in-one type optical detector. The non-contact detection method eliminates any influence on objects under measurement.



### VEHICLE IN THE LOOP SIMULATOR (RCS, Real-Car Simulation bench)

This system is suitable for transient test of actual vehicle in combination with the real-time model calculation and low inertial motor. Transient behavior that cannot be achieved with chassis dynamometer system can be reproduced.



### ENGINE TESTING SYSTEM (FAMS-R6)

The FAMS-R6 (Flexible Automatic Measuring System-Release 6) supports advanced tests such as test/verification with e-fuel and EV/HEV testing by utilizing the simulation, measurement technologies, control technologies and know-how that have cultivated so far.



### GPS SPEEDOMETER (LC-8300A)

It is a speedometer that combines the features of existing models with light weight, compact size, and high accuracy. It enables stable speed measurement regardless of the test environment, where radio interference is likely to occur due to trees and buildings. Equipped with the various test functions that comply with regulations.



### ELEVATOR SPEEDOMETER (EC-2100)

Designed for maintenance, adjustment and inspection of elevators. Wide measurement range up to 2,000 m/min, saving calculation time with 10 ms. Useful for a high speed elevator. The distance measurement function (option) can measure actual moving distance of an escalator after emergency stop.



### LASER DOPPLER SURFACE VELOCITY METER (LV-7000 series)

The LV-7000 series detects speed, uneven speed, distance, length of moving object or rotating object without contact. By connecting two sensors to one main unit, it enables to calculate difference in velocity/length between the two points in real time and output the results.



### HIGH-SPEED RESPONSE F/V CONVERTER (FV-1500)

A frequency-to-voltage (current) converter that converts frequency signal proportional to rotation speed, moving speed, etc. into voltage signal. Ideal for transient speed fluctuation analysis such as measurements of elevator speed fluctuation, electric motor startup characteristics, etc.



### VOLUMETRIC FLOW DETECTOR & DIGITAL FLOW METER (FP series/ DF-2200/FM-3100)

A complete series of volumetric flow meters, used for measuring and controlling fuel consumption of various types of engines. The FM-3100 is highly accurate and covers a wide range of flow rate. The DF-2200 is compact and space saving design for on-board.



### MASSFLOW MEASUREMENT SYSTEM (FP series/ FD-5110/ FM-3100)

By combining the Volumetric Flow Detectors and the Fuel Density Meter FD-5110 to measure flow rate and density, it enables the continuous mass flow measurement.



### ON-BOARD FUEL FLOW MEASUREMENT SYSTEM (FP-4135/ MF-3200)

The FP-4135 is compact and has a temperature range of -30 to +100°C, thus it can be installed inside the engine room. The MF-3200 is equipped with a mechanism for handling diesel engine return fuel.



### TORQUE DETECTOR (TH series)

The TH series is easy to use high precision torque detector, having a high durability and long service life. Accurate measurement has been enabled by the phase difference method using electromagnetic induction, and AC power supply and switching of the rotation direction (CW/CCW) are no longer required. The high-speed rotation type can measure up to 25,000 r/min of a rotating body.



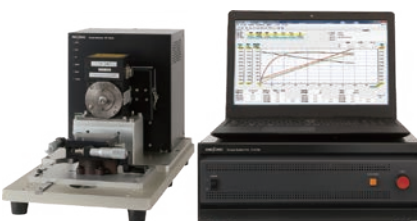
### TORQUE DETECTOR/METER

Assured high accuracy, stability and durability against overtorque. Various types of detectors cover entire range from microscopic to gigantic torque.



### TORQUE STATION PRO (TS-8700)

Measures the motor torque characteristics with high accuracy and high response. Wide variety of MT series detectors support various motors.



### ENGINE TACHOMETER

Wide selection of tachometers for gasoline engines, diesel engines and motors. Easy to use for checking engine speeds accurately in combination with engine rotation detectors.



### MOTOR & ENGINE TACHOMETER (CT-6710)

Supporting a wide variety of sensors, it makes possible to measure the rotation speed of EV/HEV motors, gasoline engines, and diesel engines, which are difficult to be detected.



### COMBUSTION ANALYSIS SYSTEM

Basic functions such as monitoring, measurement/calculation and data storage are packaged in the basic software. You can perform a variety of analyses including transient combustion, knocking, and multiple injection by adding optional software.



\* Windows\* is a registered trademark of Microsoft Corporation in the U.S.A. and other countries.



# Acoustic and Vibration Data Processing

## SOUND & VIBRATION ANALYSIS SYSTEM (OS-5000 series)

This software makes the operation of real-time measurement and detailed analysis smooth and easy. By combining it with the DS-5000, you can measure highly accurate sound and vibration data and perform detailed analysis on the site.



## SOUND & VIBRATION ANALYSIS SYSTEM (DS-5000 series)

The DS-5000 series supports wide range of measurement. Compact and battery-operated, easy to use in a limited place where a power supply is not available. Data can be recorded without a PC.



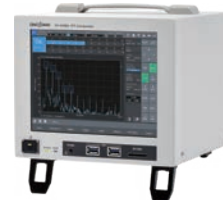
## PORTABLE 2-CH/4-CH FFT ANALYZER (CF-9200A/9400A)

All-in-one portable FFT analyzer. All FFT analysis operations can be performed easily with the hardware keys and the capacitance type touch panel, without requiring a PC for analysis. Equipped with CCLD & TEDS. Long continuous cordless operation up to 8 hours.



## FFT COMPARATOR (CF-4700A)

FFT comparator which makes accurate Pass/Fail judgment and quality inspection by analyzing the frequency signal of sound/vibration on production lines. Pass/Fail judgment function allows precise inspection of various products. Measurement data and judgment result can be managed in a PC by means of copying those data in USB memory.



## PORTABLE DATA RECORDER FOR ACOUSTICS & VIBRATION (DR-7100)

Simultaneous recording of sound and vibration is available with ease and high speed. It enables evaluation of sound and vibration according to changing rotation speed.



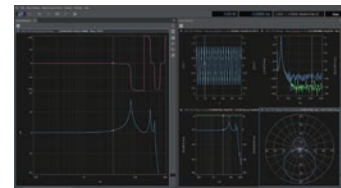
## SOUND POWER LEVEL MEASUREMENT SYSTEM (O-Solution/DS-5000)

The sound power level measurement system allows you to take efficient noise countermeasures by the measurements that comply with the latest ISO standards and easily confirming sound sources and frequency peaks.



## FREQUENCY RESPONSE MEASUREMENT SOFTWARE (OS-4100)

The OS-4100 is dedicated software that can measure the frequency characteristic of various objects with high precision and high speed, such as vibration characteristics of mechanical structures, acoustic characteristics of speakers, motor control characteristics, servo analysis, coupling response characteristics, and battery impedance characteristics.



## LASER DOPPLER VIBROMETER (LV series)

A non-contact laser vibrometer using a laser Doppler technique. You can detect the vibration of microscopic or high frequency objects with no load.



## SOUND LEVEL METER (Basic type)

- Simultaneous measurement of Lp, Leq, LE, LN, Lmax, Lmin and Lpeak.
- Wide linearity range: 100 dB
- Simple and easy data processing via RS-232C or USB.
- Comparator output function (option)



## SOUND LEVEL METER (High Performance type)

- Simultaneous measurement of Lp, Leq, LE, LN, Lmax, Lmin and Lpeak.
- Wide linearity range: 110 dB
- Possible to measure and record while listening via headphones.
- Performs more than just a sound level meter by adding options; analyzer, recorder, comparator.



## SOUND CALIBRATOR (SC-2600)

This sound calibrator conforms to IEC 60942:2017 Class 1 and has a nominal sound pressure level of 94 dB. It can be used to calibrate sound level meters and measurement microphones.



## MICROPHONE (MI series)

A series of microphones, including high sensitivity type and wide-band type for a variety of applications. The microphones exhibit good environmental stability with regard to temperature and humidity. A selection of preamplifiers meets various applications.



## LOW NOISE MICROPHONE (MI-1282M10)

It is 1/2-inch back electrets type, low noise microphone. The self-noise level (A-weighting) is extremely low at 4.5 dB (Typ.), making it ideal for measuring minute sounds. Supports CCLD (constant current drive) and TEDS.



## ULTRAMINIATURE MICROPHONE (MB-2200M10)

Ultra compact, super lightweight microphone. Sound pressure is able to be measured even in a limited space. TEDS-supported sensor that allows quick and easy measurement enables direct connection to Ono Sokki's FFT Analyzer or other CCLD supported analysis instruments.



# Dimension and Displacement Measurements

## NON-CONTACT THICKNESS METER (VE/CL series)

For conductors and semiconductors. Used with VE series gap detector, the CL series measures thickness as well as gap between sensor and objects. When using the high resolution calculation function and a sensor with measurement range from 20 to 200 μm, the minimum resolution is 0.02 μm.



## DIGITAL GAUGE (High-resolution type)

Ball spline bearing and development of new optical system achieve both of high resolution and environment resistance (IP66G). Detected signal can be obtained as square wave to connect PLC directly. The exclusive counter provides various calculation functions.



## ROTARY ENCODER (RP series)

The series has general purpose industrial type and compact type. There is a selection of pulse rates and maximum rotations.



## DIGITAL GAUGE (Sensor) (BS/GS series)

Measurement range: Max. 100 mm\*1  
Resolution: 0.1\*2 μm to 10 μm  
Various types of gauge sensors (including space-saving type) are available. Please use with the DG series gauge counter.



## DIGITAL GAUGE (Counter) (DG series)

Combined with the BS/GS series gauge sensor. DIN 72 standard models which are easily mounted on a variety of panels.



## ACCELEROMETER (NP series)

Accelerometers are available in both charge output and built-in amplifier types. Used in combination with PS series amplifiers or other ONO SOKKI instruments, complex vibrations of objects can be measured with a high degree of accuracy. A sensitivity calibrator is optionally available.



## LOW FREQUENCY ACCELEROMETER (NP-7320N10)

This high sensitivity, low noise tri-axial accelerometer can measure nano-level floor vibrations. It can be directly connected to devices with built-in CCLD, such as Ono Sokki's FFT analyzers, and is TEDS compatible, which prevents human error.



## VIBRATION COMPARATOR (VC-2200/3200)

Useful for maintenance and constant monitoring of production facilities with high accuracy, high function, and low cost in a single unit. Easy sensor setting by TEDS function. Features "visual and auditory" monitoring of sound and vibration by headphones and on-screen numerical displays and bar graphs.



# History

- 1954: Ono Sokki Co., Ltd. was established in Yokohama.  
Manufactured the first tachometer in Japan for use with jet engines.
- 1955: Started manufacture of a wide variety of digital instrumentation.
- 1961: For the first time in Japan, Ono Sokki manufactured transistorized digital instrumentation.
- 1963: Developed digital torque measurement instruments which were widely acclaimed throughout Japan and the world.
- 1963: Completed and delivered computer on-line data management device for use in engine development.
- 1968: Introduction of IC technology into all products.
- 1973: Development of CF-type statistical analysis system using a built-in minicomputer.
- 1977: Development of ultra-rugged high-reliability linear gauge.
- 1979: Developed the first portable dual channel FFT analyzer with 64-K byte mass-storage memory, model CF-500 and put on mass-production line.
- 1986: Listed on the First Section of the Tokyo Stock Exchange.
- 1986: Ono Sokki Technology Inc. was established.
- 1990: New Technical Center was established in Yokohama.
- 1990: Acoustics Lab. was established in Technical Center.
- 1992: Ono Sokki Beijing Office was established.
- 1996: Conformance to ISO 9001 was certified.
- 1997: Conformance to ISO 14001 was certified.
- 2004: Automotive Testing Lab. was established in Technical Center.
- 2005: Automotive Testing Lab. Utsunomiya was established in Utsunomiya factory.
- 2006: Ono Sokki (Thailand) Co., Ltd. was established.
- 2009: New office building was established in Shin-Yokohama. Relocation of head quarter and Software Development Center to the new building in Shin-Yokohama.
- 2012: Ono Sokki India Private Ltd. was established.  
Ono Sokki Shanghai Technology Co., Ltd. was established.
- 2015: Automotive Testing Lab. Utsunomiya II was established in Utsunomiya Technical & Product Center.
- 2018: Ono Sokki Software Co., Ltd. was established.
- 2019: Upgraded bench test system for NV evaluation in Automotive Testing Lab, Utsunomiya Technical & Product Center.
- 2024: Relocation of headquarter to the Minato Mirai district, Yokohama.

## Overseas Subsidiaries and Offices

### INDIA

Ono Sokki India Private Ltd.  
Plot No.20, Ground Floor, Sector-3, IMT  
Manesar Gurgaon - 122050, Haryana,  
INDIA  
Phone : +91-124-421-1807  
URL : <https://onosokki.co.in/>  
E-mail : [osid@onosokki.co.in](mailto:osid@onosokki.co.in)

### U.S.A.

Ono Sokki Technology Inc.  
2100 Golf Road, Suite 370  
Rolling Meadows, IL. 60008, U.S.A.  
Phone : +1-630-627-9700  
Fax : +1-630-627-0004  
URL : <https://www.onosokki.net>  
E-mail : [info@onosokki.net](mailto:info@onosokki.net)

### THAILAND

Ono Sokki (Thailand) Co., Ltd.  
1/293-4 Moo.9 T.Bangphud, A.Pakkred  
Nonthaburi 11120, Thailand  
Phone : +66-2-584-6735  
Fax : +66-2-584-6740  
URL : <https://www.onosokki.co.th/>  
E-mail : [sales@onosokki.co.th](mailto:sales@onosokki.co.th)

### P.R.CHINA

Ono Sokki Shanghai Technology Co., Ltd.  
Room 506, No.47 Zhengyi Road, Yangpu District,  
Shanghai, 200433, P.R.C.  
Phone : +86-21-6503-2656  
Fax : +86-21-6506-0327  
URL : <https://shonosokki.com/>  
E-mail : [admin@shonosokki.com](mailto:admin@shonosokki.com)

### WORLDWIDE

Ono Sokki Co., Ltd.  
12F Yokohama Connect Square  
3-3-3 Minatomirai, Nishi-ku, Yokohama 220-0012, Japan  
Phone : +81-45-514-2603  
Fax : +81-45-935-3808  
URL : <https://www.onosokki.co.jp/English/english.htm>  
E-mail : [overseas@onosokki.co.jp](mailto:overseas@onosokki.co.jp)

