

# Gasoline Engine Tachometer SE-2500

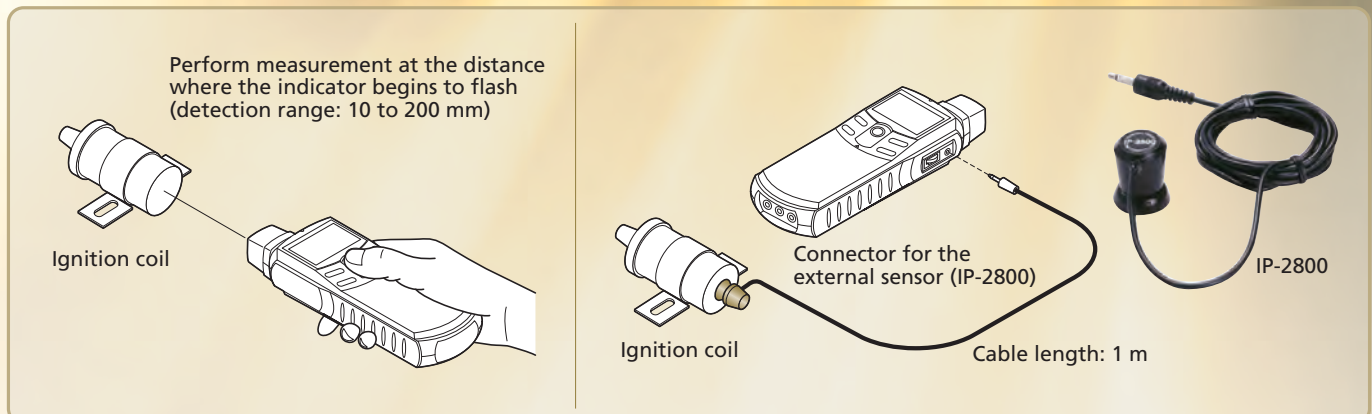
For gasoline engine measurement applications



## Features

- 1 Capable of performing measurement at a distance of 1 m when the external sensor (IP-2800) is used
- 2 Makes engine rotation measurement from vibrations by using the VP-201/1210 (sold separately)
- 3 Measurement can be performed in 1 r/min or 0.01 r/s units
- 4 Three outputs—**analog, monitor and pulse**—provided as standard  
Use the analog output function to record the number of rotations, the monitor output function to check the sensor's detection waveform, and the pulse output function to output rotation synchronization signals.
- 5 **Large LCD with backlight**  
(Character height: 10.2 mm)
- 6 **Built-in memory function**  
20 data (MAX.) can be saved to memory.
- 7 **Can be mounted on a tripod**  
The tachometer can be fixed to a tripod for continuous measurement.

## Measurement method



# ONOSOKKI

## Specifications

Applicable engines	Gasoline engines, 2-cycle (1, 2, 3, 4 cylinders); 4-cycle (1, 2, 3, 4, 5, 6, 8, 10, 12 cylinders)			
Detection method	Electromagnetic induction			
Detection distance	10 to 200 mm			
Object of measurement	Ignition coil			
Calculation method	Periodic operation method			
Measurement time	1s + the time required for 1 period or less			
Display	5-digit LCD, with backlight (character height: 10.2 mm)			
Display update time	1±0.2 s			
Measurement units	r/min, r/s			
Measurement ranges	2-cycle	4-cycle	Number of rotations (r/min)	
	—	1 cylinder	120 to 20000	
	1 cylinder	2 cylinders	120 to 20000	
	—	3 cylinders	120 to 20000	
	2 cylinders	4 cylinders	120 to 20000	
	—	5 cylinders	120 to 20000	
	3 cylinders	6 cylinders	120 to 15000	
	4 cylinders	8 cylinders	120 to 12000	
	—	10 cylinders	120 to 10000	
	—	12 cylinders	120 to 8000	
(When r/s is used as a unit, the measurement range will be obtained by dividing the r/min numerical value by 60.)				
Measurement accuracy	Displayed value x (±0.02 %) (Not including a quantization error)			
Measurement functions	Memory function	20 data (MAX.)		
	Over-range function	The over-range alarm (ERROR mark) is displayed when the measured value exceeds the display range.		
	Rotation upper limit alarm function	The upper limit alarm (↑ mark) is displayed when the number of rotations exceeds the preset upper limit value.		
	Sensitivity adjustment function	A rotary dial at the right-hand side of the device is used to adjust the sensitivity.		
Output section	Analog output	Description of output function	The output corresponds to the displayed number of rotations	
		Output voltage	0 to 1 V/0 to FS (FS can be specified.)	
		Conversion method	10-bit D/A conversion	
		Linearity	±1%/FS	
		Output update time	50ms + the time required for 1 period or less	
	Monitor output	Temperature stability	±0.05%/FS/°C (span & zero)	
		Setting error	±0.5%/FS	
		Load resistance	At least 100 kΩ	
	Pulse output	Description of output function	The external sensor signal which was reshaped to a waveform (analog output for monitoring purpose)	
		Load resistance	At least 100 kΩ	
General specifications	Power source	Four AAA batteries or exclusive AC adapter (PB-7090, sold separately)		
	Battery life	At least 32 hours (when the backlight is OFF) At least 8 hours (when the backlight is ON) * When alkaline batteries are used at 20°C		
	Low battery alarm indicator	A low battery alarm (LOW mark) is displayed when the battery voltage falls below 4.4 V.		
	Operating temperature range	0 to +40°C		
	Storage temperature range	-10 to +50°C		
	Outer dimensions	198.5 (W) x 47.5 (H) x 66 (D) mm		
	Weight (including batteries)	Approx. 300 g		
	Accessories	Ignition detector (IP-2800)	1	
		Type AAA batteries	4	
		Carrying case	1	
* Please refer to an instruction manual for the operating procedures.				
* The measurement may not be performed normally depending on type of an engine or other reason. Please contact your nearest distributor for more details.				

## Options (sold separately)

**Engine vibration detector  
VP-201/1210\***



\* High sensitive type

**AC adapter  
PB-7090**



**Signal cable  
(For both analog and pulse output signals)  
AX-501**



**Magnetic stand/Stand jig  
HT-0522/0521A**



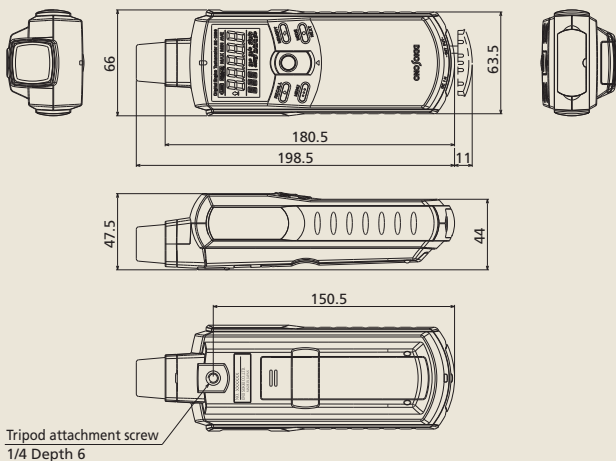
(Shown with tachometer mounted)

**Tripod  
LA-0203C**



## Outer dimensions

(Unit: mm)



**ONOSOKKI**

**WORLDWIDE ONO SOKKI CO., LTD.**

1-16-1 Hakusan, Midori-ku, Yokohama, 226-8507, Japan  
Phone : +81-45-935-3918 Fax : +81-45-930-1808  
E-mail : overseas@onosokki.co.jp

\*Outer appearance and specifications are subject to change without prior notice.  
**URL: <http://www.onosokki.co.jp/English/english.htm>**

### U.S.A.

Ono Sokki Technology Inc.  
2171 Executive Drive, Suite 400  
Addison, IL. 60101 U.S.A.  
Phone : +1-630-627-9700  
Fax : +1-630-627-0004  
E-mail : info@onosokki.net  
<http://www.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  
E-mail : osth\_sales@onosokki.co.jp

### INDIA

Ono Sokki India Private Ltd.  
Unit No. 4B, Ground Floor, Tower-A, Spazedge,  
Sector47, Gurgaon-Sohna Expressway, Gurgaon,  
Haryana-122002, INDIA  
Phone : +91-124-421-1807  
Fax : +91-124-421-1809  
E-mail : osid@onosokki.co.in

### 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  
E-mail : admin@shonosokki.com