

# Gasoline Engine Tachometer

# SE-1620

Application for both on-vehicle  
and built-in at bench type

Simply attach an ignition pulse detector or one of our other compatible detectors to the engine to enable measurement of the number of revolutions of a gasoline engine. The inputs, outputs and input power supply are all isolated to ensure the output of analog and pulse signals with superior noise resistance and stability characteristics.



SE-1620

## — Compatible Detectors —



**IP-292**  
Ignition pulse detector



**IP-296**  
Ignition pulse detector



**LG-916**  
Optic-fiber sensor/photoelectric reflection-type  
fiber detector (photoelectric system)



**IP-3000**  
Ignition pulse detector



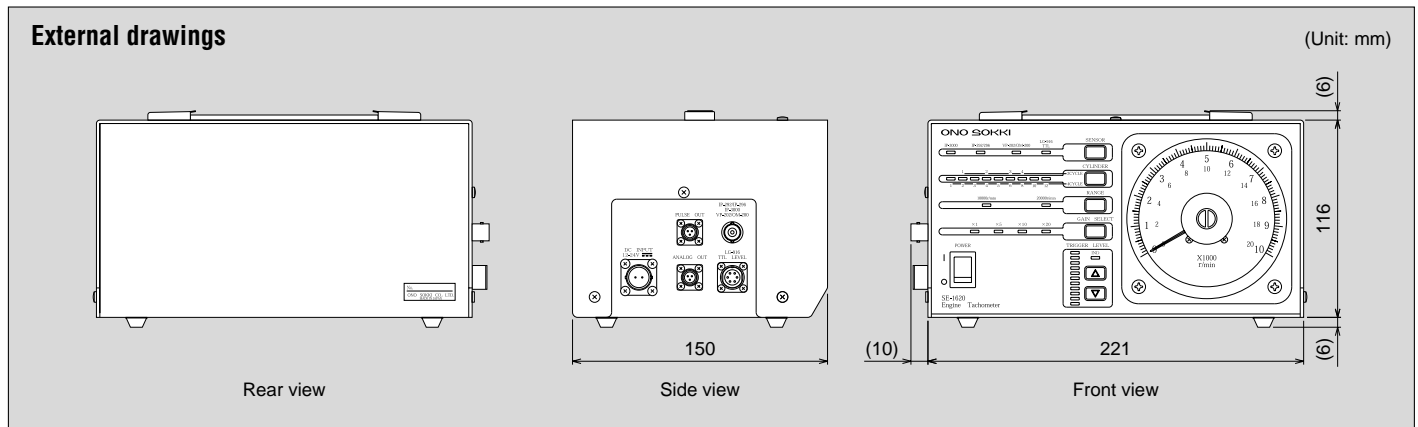
**OM-200**  
Ignition pulse detector



**VP-202**  
Gasoline/diesel engine detector

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# SE-1620 Gasoline Engine Tachometer



## Description

The SE-1620 is an engine tachometer that performs measurement of the number of revolutions of a gasoline engine by connecting an engine revolution sensor such as an ignition pulse detector. A 100-mm wide-angle meter is used for the display, and both analog output and pulse output functions are provided as standard.

## Measurement Ranges

2-cycle: 1, 2 cylinders ; 500 to 20,000 r/min  
 3 cylinders ; 500 to 16,000 r/min  
 4 cylinders ; 500 to 12,000 r/min  
 4-cycle: 1 to 5 cylinders; 500 to 20,000 r/min  
 6 cylinders ; 500 to 16,000 r/min  
 8 cylinders ; 500 to 12,000 r/min  
 10 cylinders ; 500 to 10,000 r/min  
 12 cylinders ; 500 to 8,000 r/min

## Display

Displaying meter : 100-mm wide-angle meter, Class 1.5  
 Meter scale Double scale: 0 to 10,000 r/min or 0 to 20,000 r/min  
 Scale printed in monochrome

## Input Section

Compatible detectors (Optional) :

- IP-292 ; Ignition pulse detector (For primary side cable of ignition coil)
- IP-296 ; Ignition pulse detector (For secondary side cable of ignition coil)
- IP-3100 ; Ignition pulse detector (High sensitivity type)
- OM-200 ; Ignition pulse detector (Electro-magnetic type)
- VP-202 ; Gasoline/diesel engine detector (Low sensitivity type)
- LG-916 (TTL signal input) ; Photoelectric reflection type detector

Applicable engines: Gasoline engines

- 2-cycle (1 to 4 cylinders)
- 4-cycle (1 to 6, 8, 10, 12 cylinders)

Input connectors : Sensor input: BNC connector  
 TTL input: 6-pin connector (R03RB6F, externally-supplied power supply; 12 V 100 mA)  
 Input gain selector : x1, x5, x10, x20, selectable

## Output Section

### Analog Output

Output voltage : 0 to 10 V (In proportion to 0 to 10,000 r/min or 0 to 20,000 r/min)  
 Output voltage setting accuracy : Zero;  $\pm 0.2\%/FS$   
 Span;  $\pm 0.3\%/FS$   
 Linearity :  $\pm 0.2\%/FS$  at most  
 Ripple : 250 mVp-p or less (at 500 r/min)  
 Temperature coefficient : Zero;  $\pm 0.01\%/FS/^{\circ}C$   
 Span;  $\pm 0.015\%/FS/^{\circ}C$   
 Response : Approx. 20 ms  
 Load resistance : At least 10 k $\Omega$   
 Output connector : R03-RB3F

### Pulse Output

Output waveform : Rectangular waveform  
 Pulse width; Approx. 2 ms  
 Output as 1 pulse/2 revolutions (1 pulse /revolution available as an option)  
 Output voltage : Hi level; At least 4.5 V  
 Lo level; Up to 0.5 V  
 Load resistance : At least 10 k $\Omega$   
 Output connector : R03-RB3F

## General Specifications

Power supply : 12 V to 24 VDC  
 Connector : RM12BRB-2P  
 Current consumption : Approx. 470 mA (at 12 VDC)  
 Operating temperature range : 0 to 40 $^{\circ}C$   
 Storage temperature range : -10 to 60 $^{\circ}C$   
 Operating humidity range : 80% RH max. (non-condensing)  
 Storage humidity range : 80% RH max. (non-condensing)  
 External dimensions : 221 (W) x 116 (H) x 150 (D) mm  
 Weight : Approx. 1.3 kg

## Accessories

Analog output cable : 1.9 meter x 1 pc.  
 Pulse output cable : 1.9 meter x 1 pc.  
 Power cable : 3.4 meter x 1 pc.  
 User's manual : 1 copy

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\* Outer appearance and specifications are subject to change without prior notice.

URL: <http://www.onosokki.co.jp/English/english.htm>

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