# Handheld Digital Tachometer
## (High Rotational Speed Measurement Model)
# HR-6800

Digital Tachometer HR-6800

×10 r/min

ONO SOKKI

*The photograph shows the HR-6800 used in combination with the MP-5350 (sold separately).

## MP-5350
### Electromagnetic rotation detector

MP-5350
ONO SOKKI CO.,LTD.
MADE IN JAPAN
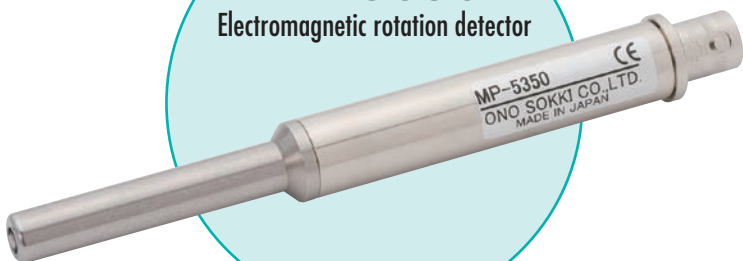
# ONO SOKKI

# Non-contact measurement of the rotational speed of high-speed rotating objects up to a maximum of 999,990 r/min!!

## Features

**1** **High-speed rotation measurement**
100 to 999,990 r/min

**2** **Built-in memory function**
Up to a maximum of 20 data can be saved to memory.

**3** **Both analog and pulse outputs provided as standard**
Used for recording rotational speeds and as rotation synchronization signals

**4** **Built-in peak hold function**
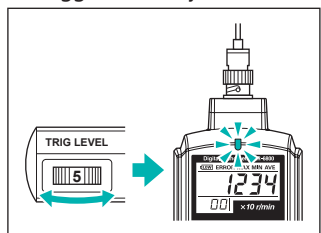The maximum and minimum values can be displayed during measurement.

**5** **Large LCD with backlight**

Battery compartment
(Four AAA alkaline batteries)

Screw for tripod attachment

Trigger level adjustment dial

Connector for the AC adapter
Connector for analog output
Connector for pulse output

### Tripod mounting adapter
The MI-0301 adapter (provided with the HR-6800) enables MP-5350 to be mounted on a tripod.
(The tripod is sold separately.)

### Easy-to-read, large LCD (with backlight)

Indicates when the measurement value is over the display range.

Displays the low battery alarm

Displays the maximum and minimum values (during peak hold measurement)

Indicates when number of rotation is over the preset upper limit value.

Displays the measured values/menu selections /preset values

Displays the memory address/setting parameter

Type A/B selection switch
Used to select the type according to the rotational speed range

| Selected type | RANGE | Rotational speed range |
|---|---|---|
| Type A | Hi | 10,000 to 999,990 r/min |
| | Lo | 100 to 50,000 r/min |
| Type B | – | 200,000 to 999,990 r/min |

Note: Please refer to the instruction manual for the operating procedures.

### HR-6800 Specifications

| | |
|---|---|
| Target measurement objects | Rotating objects used in dentistry, rotating objects used in texturizing machine, rotating objects used in high-speed machine tools<br>Note: Target measurement objects must be magnetized. |
| Display | Large-size 5-digit LCD (Character height: 10.2 mm) |
| Measurement time | Within 50 ms + the time required for 10 input signal cycles |
| Display refresh rate | Approx. 1 second or 0.5 second, selectable |
| Measurement unit | 10 r/min (rotational speed) |

| Rotational speed measurement range | Selected type | RANGE | Rotational speed range |
|---|---|---|---|
| | Type A | Hi | 10,000 to 999,990 r/min |
| | | Lo | 100 to 50,000 r/min |
| | Type B | – | 200,000 to 999,990 r/min |
| | Note: When the number of pulses setting is "1". | | |

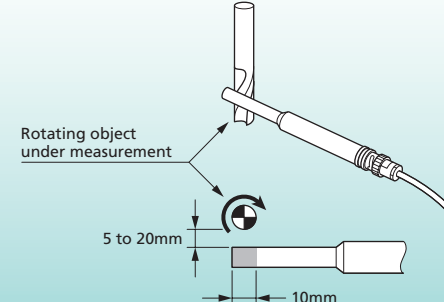| | |
|---|---|
| Measurement accuracy | Displayed value x (±0.02%) ±1 count |
| Peak hold function | Maximum value (MAX), minimum value (MIN) |
| Memory function | Up to a maximum of 20 data |
| Over-range display | An "ERROR" mark is displayed when the measured value exceeds the measurement range. |
| Rotation upper limit alarm function | An upper limit alarm mark (↑ mark) is displayed when the rotational speed exceeds the preset upper limit value. |
| Analog output | Output in proportional to the displayed rotational speed values.<br>Output voltage: 0 to 1V/0 to F.S. (F.S. is specified by user.)<br>Output update time: Within 50 ms + the time required for 10 input signal cycles |
| Monitor output | Analog output after the sensor signal waveform has been shaped.<br>(prior to pulse waveform conversion) |
| Pulse output | One pulse per signal detected<br>Output voltage: Hi level; At least 4.5 V<br>Lo level; Up to 0.5 V |
| Power source | Four AAA-type batteries (1.5 V) or exclusive AC adapter (PB-7080, sold separately) |
| Battery life | Approx. 13 hours (when the backlight is OFF.)<br>Approx. 8 hours (when the backlight is ON.)<br>(when alkaline batteries are used at 20°C) |
| Operating temperature | 0 to +40°C |
| Storage temperature | -10 to +50°C |
| Outer dimensions | 66 (W) x 189.5 (L) x 47.5 (D) mm |
| Weight | Approx. 280 g (including the batteries) |
| Accessories | AAA-type batteries          4 pieces<br>Tripod mounting adapter (MI-0301)  1 piece<br>Carrying case          1 piece |

### MP-5350 Specifications

| | |
|---|---|
| Detection method | Electromagnetic induction |
| Connection cable (provided as standard) | 1-m length (with a BNC connector at both ends) |
| Operating temperature | 0 to +40°C |
| Storage temperature | -10 to +50°C |
| Outer dimensions | 107 x φ14 mm |
| Weight | Approx. 50 g (excluding signal cable) |
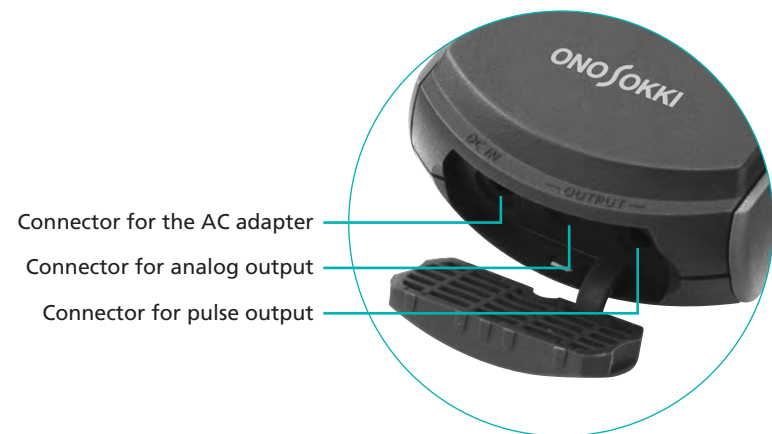
### Measuring the rotational speed of a dental handpiece or similar object
Rotating object under measurement
5 to 20mm
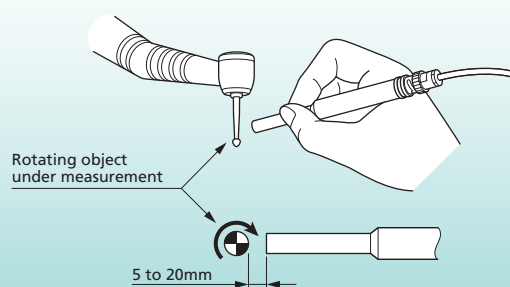
### Measuring the rotational speed of an end mill or drill
Rotating object under measurement
5 to 20mm
10mm

### Measuring the rotational speed of a yarn texturizing machine
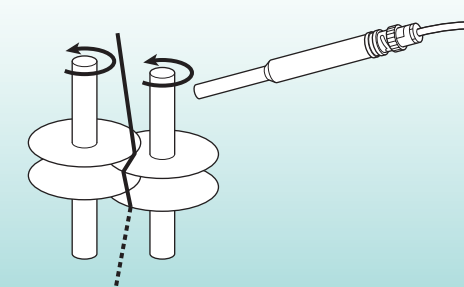
## Options (sold separately)

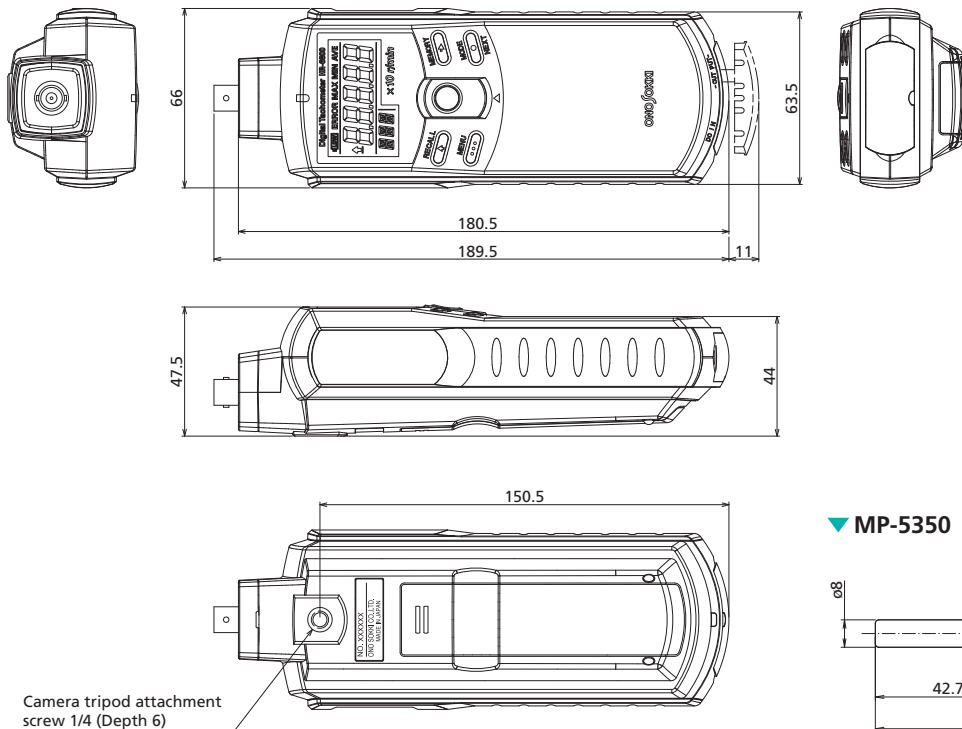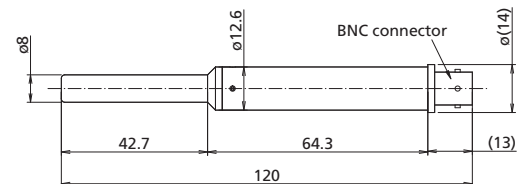| AC adapter<br>**PB-7080** | Signal cable<br>**AX-501** | Magnetic stand/Stand jig<br>**HT-0522/0521A** | Tripod<br>**LA-0203B** |
|---|---|---|---|

## External drawing

(Unit: mm)

▼ **HR-6800**

66
180.5
189.5
11
63.5
47.5
44
150.5

Camera tripod attachment
screw 1/4 (Depth 6)

▼ **MP-5350**

ø8
ø12.6
BNC connector
ø(14)
42.7
64.3
(13)
120