

Handheld Digital Tachometers

# HT Series

HT-3200/4200



ONO SOKKI

## Contact type

The HT-3200 offers a Lo measurement range that starts from 0.5 r/min.  
The circumferential ring and contact tip for rotation measurement can be stored in the back-side pocket of the main body.

- Capable of measurement from a low speed at 0.5 r/min (when low range selection) up to a high speed at 10,000 r/min (when high range selection).
- A large-size display device (10.5-mm character height) is incorporated into the compact, lightweight device.
- Built-in convenient memory function for easy confirmation of the measured results
- Dual-purpose type—replacing the contact tip with the circumferential ring enables circumferential measurement
- Equipped with a storage pocket for the circumferential ring
- The latest measurement value continues to be displayed for approximately 30 seconds even after the power has been switched off.
- Battery replacement time indicator is provided.



## Non-contact type

The HT-4200 is a compact, non-contact type handheld digital tachometer.

Affix one of the reflective marks to the rotating surface of the target measurement object, and then aim the red visible ray at the mark.

If multiple marks are affixed to the target of measurement object, measurement can be performed at a lower speed.

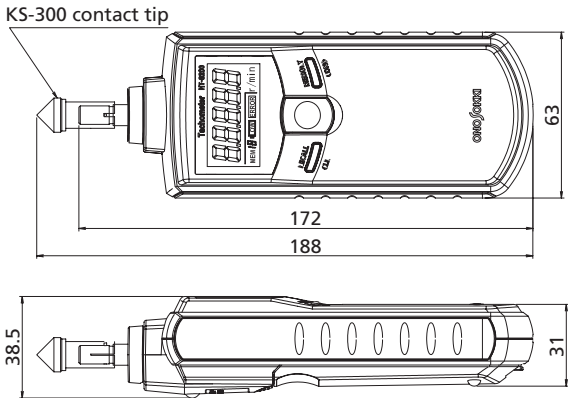
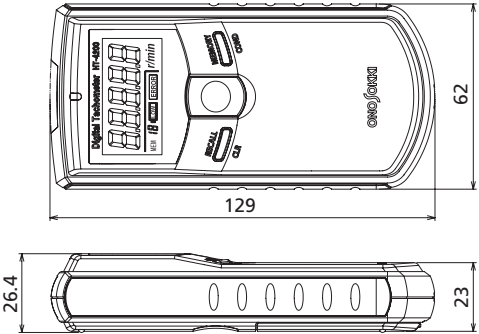
- The 5-digit display enables wide-ranging measurement from 4 r/min (when multiple reflective marks are used.) to 50,000 r/min (when single reflective mark is used.)
- A large-size display device (10.5-mm character height) is incorporated into the compact, lightweight device which can be easily slipped into your shirt pocket.
- Built-in convenient memory function for easy confirmation of the measured results
- Even shiny shafts can be measured by using the reflective marks provided with the device.
- Measurement can be performed over a wide range from 30 r/min to 50,000 r/min, in 1-r/min resolution (when one reflective mark is used).
- Measurement can be performed safely at a distance ranging from 20 to 300 mm between the detection unit and the target measurement surface (the reflective mark surface).
- The latest measurement value continues to be displayed for approximately 30 seconds even after the power has been switched off.
- Battery replacement time indicator is provided.










Specifications	
Detection method	Contact method
Display	5-digit LCD (10.5-mm character height)
Measurement update time	1-s automatic update (2-s update for Lo range: 0.5 to 1.0 r/min) 1-s automatic update (2-s update for Hi range: 5 to 10 r/min)
Rotation speed measurement range	0.5 to 10,000 r/min Lo: 0.5 to 2,000.0 r/min Hi: 5 to 10,000 r/min
Circumferential speed measurement range	When the KS-200 circumferential ring (provided) is used: 0.05 to 1000.0 m/min When the KS-100 circumferential ring (option) is used : 0.5 to 10,000 mm/s
Measurement accuracy	Low (Lo) range: 0.5 to 1249.9 r/min speeds      Within $\pm 0.1$ r/min 1250.0 to 2000.0 r/min speeds      Within $\pm 0.2$ r/min High (Hi) range: 5 to 10,000 r/min speeds      Within $\pm 1$ r/min
Memory function	10 data can be memorized.
Data hold function	Auto power off when 30 seconds have elapsed after the end of measurement.
Low battery indication	The "LOW" mark is displayed when the battery voltage falls below 3.3 V.
Over-range display	An "ERROR" mark is displayed.
Power source	Three AAA-type batteries (1.5 V) Continuous measurement time: Approx. 20 hours (when alkaline batteries are used, at 20°C)
Operating temperature	0 to +40°C
Storage temperature	-20 to +55°C
Outer dimensions	63 (W) x 172 (L) x 38.5 (D) mm
Weight (including batteries)	Approx. 200 g
Accessories	Contact tip for rotation measurement (KS-300)      2 pieces (One tip can be stored in the back side pocket main body) Circumferential ring (KS-200, m/min)      1 piece (can be stored in the back-side pocket of main body) AAA-type batteries      3 pieces User's manual      1 copy

Specifications															
Detection method	Red visible ray photoelectric reflection method														
Detection distance	20 to 300 mm														
Display	5-digit LCD (10.5-mm character height), fixed measurement unit (r/min)														
Measurement update time	1-s automatic update (2-s update when the circumferential speed is lower than 60/number of reflective marks r/min)														
Measurement range	<p>Measurement resolution: 1 r/min The affixing of multiple reflective marks enables measurement of lower rotation speeds.</p> <table border="1"> <thead> <tr> <th>Measurement speed</th> <th>Number of reflective marks</th> </tr> </thead> <tbody> <tr> <td>30 to 50,000 r/min</td> <td>1</td> </tr> <tr> <td>15 to 25,000 r/min</td> <td>2</td> </tr> <tr> <td>10 to 16,667 r/min</td> <td>3</td> </tr> <tr> <td>8 to 12,500 r/min</td> <td>4</td> </tr> <tr> <td>5 to 8,333 r/min</td> <td>6</td> </tr> <tr> <td>4 to 6,250 r/min</td> <td>8</td> </tr> </tbody> </table>	Measurement speed	Number of reflective marks	30 to 50,000 r/min	1	15 to 25,000 r/min	2	10 to 16,667 r/min	3	8 to 12,500 r/min	4	5 to 8,333 r/min	6	4 to 6,250 r/min	8
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4 to 6,250 r/min	8														
Measurement accuracy (when one reflective mark is used)	<p>30 to 12,499 r/min speeds      Within <math>\pm 1</math> r/min  12,500 to 24,999 r/min speeds      Within <math>\pm 2</math> r/min  25,000 to 50,000 r/min speeds      Within <math>\pm 4</math> r/min</p>														
Measurement of the number of pulses	The number of reflective marks used can be specified in order to perform measurement from lower rotation speeds. Specifiable values: 1, 2, 3, 4, 6, 8 P/R														
Memory function	10 data can be memorized.														
Data hold function	Auto power off when 30 seconds have elapsed after the end of measurement.														
Low battery indication	The "LOW" mark is displayed when the battery voltage falls below 3.3 V.														
Over-range display	An "ERROR" mark is displayed.														
Power source	Three AAA-type batteries (1.5 V), Continuous measurement time: Approx. 20 hours (when alkaline batteries are used, at 20°C)														
Operating temperature	0 to +40°C														
Storage temperature	-10 to +55°C														
Outer dimensions	62 (W) x 129 (L) x 26.4 (D) mm														
Weight (including batteries)	Approx. 130 g														
Accessories	<p>Reflective marks      1 sheet (25 marks)  AAA-type batteries      3 pieces  User's manual      1 copy</p>														



<b>HT-3200</b> (for contact-type measurement)	<b>HT-4200</b> (for non-contact-type measurement)
<p><b>Dimensional diagram</b></p> <p>(Unit: mm)</p>  <p>KS-300 contact tip</p>	<p><b>Dimensional diagram</b></p> <p>(Unit: mm)</p> 
<p><b>Accessories</b></p> <ul style="list-style-type: none"> <li>• Contact tip for rotation measurement (KS-300) 2 pieces (One of the two tips can be stored inside the HT-3200)</li> <li>• Circumferential ring (KS-200, m/min) 1 piece (Can be stored inside the HT-3200)</li> <li>• AAA-type batteries 3 pieces</li> <li>• User's manual 1 copy</li> </ul>	<p><b>Accessories</b></p> <ul style="list-style-type: none"> <li>• Reflective marks (12-mm square x 25 marks) 1 sheet</li> <li>• AAA-type batteries 3 pieces</li> <li>• User's manual 1 copy</li> </ul>

### Accessories (sold separately)

<p><b>Contact tips (for contact-type measurement)</b></p> <p>Circumferential ring (mm/s) <b>KS-100</b></p>  <p>Diameter <math>\phi 19.1</math> mm Peripheral length 60 mm Width 3.4 mm</p>	<p>Circumferential ring (m/min) <b>KS-200</b></p>  <p>Diameter <math>\phi 31.8</math> mm Peripheral length 100 mm Width 4 mm</p>	<p><b>Reflective marks</b> (for non-contact-type measurement) <b>HT-011</b></p>  <p>The recurrent reflectors incorporated in the reflective marks make them optimal for use with the HT-4200 and HT-5500 models. (12 mm x 12 mm size, 25 marks per sheet; 10 sheets per pack)</p>	<p><b>Carrying cases</b></p> <p>Carrying case for HT-3200 <b>HT-0300</b></p>  <p>Carrying case for HT-4200 (Hard case type) <b>HT-0400</b></p>  <p>Carrying case for HT-4200 (Soft case type) <b>HT-0003</b></p> 
<p>Rotating contact tip (for rotation measurement) <b>KS-300</b></p> 	<p>Extension shaft for KS-300 <b>KS-700</b></p>  <p>Length: 40 mm</p>		

**ONOSOKKI**

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