High 0.01 rpm resolution
Wide range digital tachometer covers up to 100,000 rpm

Digital tachometers offering high resolution and resolution, and covering a wide range up through 100,000 rpm. Choose from two models to match your needs: the basic 3403 and the multi-functional 3404.
High-precision, high-resolution
Maximum 0.01 rpm resolution and high ± 1 digit precision make the tachometer effective for precise measurements.

Internal micro-computer for multi-functional performance (3404 only)
MIN, MAX-Holds minimum and maximum rpm/rps values.
TOTAL-Provides total rotation counts from 0 to 500,000 for real-time rotation count measurement.
PERIOD-Accurately measure rotation pulses from 600 μs to 2.000 seconds.

Analog output (3404 only)
Stable analog signal output from low to high speeds provides clear recording by merely connecting your present recorder. Output sampling mode can be set to slow or fast to meet different application needs.

Double performance from one tachometer
By using the optional 9213 contact adapter the 3403 and 3404 become contact-type tachometers, while the period ring can be used in applications like measurement of conveyer line speed (period).

Simple reflector detection check
LED and buzzer signals confirm that the light pulses reflected from the tape on the rotating body are being picked up. Signals can be turned on and off freely.

rpm ↔ rps
Switch units even during measurement.

Auto-ranging function covers from 30 to 100,000 rpm.

Tripod mounting socket included.

AC and DC power supplies may be used.

---

Measurement range

**Note:** Contact adapter may be used for rotations up to 20,000 rpm.

**SLOW** sampling (3403 and 3404)

<table>
<thead>
<tr>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00 to 199.99</td>
<td>±1 dgt.</td>
</tr>
<tr>
<td>200.0 to 1999.9</td>
<td>±2 dgt.</td>
</tr>
<tr>
<td>2000 to 19999</td>
<td>±4 dgt.</td>
</tr>
<tr>
<td>20000 to 199999</td>
<td>±10 dgt.</td>
</tr>
</tbody>
</table>

**FAST** sampling (3404 only)

<table>
<thead>
<tr>
<th>Range</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.00 to 1999.9</td>
<td>±0.1 dgt.</td>
</tr>
<tr>
<td>2000 to 19999</td>
<td>±0.2 dgt.</td>
</tr>
<tr>
<td>20000 to 199999</td>
<td>±0.4 dgt.</td>
</tr>
<tr>
<td>200000 to 1999999</td>
<td>±0.8 dgt.</td>
</tr>
</tbody>
</table>

---

**Specifications**

**Measurement method**
Visible light reflectance

**Display**
LCD 4 1/2 digits (5 digit display for 20,000 counts or higher, lowest digit fixed to zero).
TOTAL measurement 5 digits (3404 only).

**HOLD** • rpm • rps • _ (MAX. MIN. TOTAL : period) • μs (3404 only)

**Overscale display**
5 dgt. for 20,000 counts or higher, lowest digit fixed to zero.

**Reflected light detection check**
Buzzer and LED

**Operating temperature/humidity**
0 to 40 °C 80% RH maximum (no condensation) 100% VDC (1A, 3404 only).
Output accuracy ±1% rdg. ±1% V, output resistance 3kΩ

**Power supply**
SUM3 (AA) *4 Continuous battery operation time approx. 16h
AC adapter also available (6V 120mA)

**Dimensions and weight**
180mm × 62W × 38Dmm, 250g (3403), 260g (3404)

---

**Selection guide**

<table>
<thead>
<tr>
<th>Measurement method</th>
<th>Single-function type</th>
<th>Multi-function type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-contact</td>
<td>Non-contact</td>
<td>3403</td>
</tr>
<tr>
<td>FAST/SLOW mode select</td>
<td>0.7 to 2.0 sec</td>
<td>3404</td>
</tr>
<tr>
<td>MAX. MIN. TOTAL (total count measurement)</td>
<td>200.0 to 1600.0</td>
<td>Mode of measurement</td>
</tr>
<tr>
<td>Analog output</td>
<td>200.0 to 1600.0</td>
<td>Period measurement</td>
</tr>
<tr>
<td>Auto-range function</td>
<td>200.0 to 1600.0</td>
<td></td>
</tr>
<tr>
<td>Data hold function</td>
<td>200.0 to 1600.0</td>
<td></td>
</tr>
<tr>
<td>Tripod mounting</td>
<td>200.0 to 1600.0</td>
<td></td>
</tr>
<tr>
<td>AC power pack</td>
<td>200.0 to 1600.0</td>
<td></td>
</tr>
</tbody>
</table>

---

**Optional accessories**

9211 Reflective tape (10 sheets)
(30 pieces per sheet, each sheet 12 × 12 mm)

9094 Output cord (1.5 m)

**Contact adapter**

9213 (includes 9032, two 9033 and 9212)
9032 Metal contact tip
9033 Rubber contact tip
9212 Peripheral ring

**Dimensions:** 70H × 62W × 39Dmm (Not including contact tip)

---

**Standard packing**
(discard plastic box)

<table>
<thead>
<tr>
<th>Sets</th>
<th>N.W/kg</th>
<th>G.W/kg</th>
<th>M³</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>16</td>
<td>18</td>
<td>88</td>
</tr>
</tbody>
</table>

---

**DISTRIBUTED BY**

HIOKI E.E. CORPORATION
HEAD OFFICE:
81 Koizumi, Ueda, Nagano, 386-1192, Japan
TEL +81-268-28-0565 / FAX +81-268-28-0568
E-mail: e-com@hioki.co.jp

HIOKI USA CORPORATION:
6 Corporate Drive, Cranbury, NJ 08512 USA
TEL +1-609-629-9109 / FAX +1-609-629-9108
E-mail: hioki@hiokiusa.com

Shanghai Representative Office:
1704 Shanghai Times Square Office
93 Huashan Road, Shanghai, 200021, P.R.China
TEL +86-21-6391-0090, 0092
FAX +86-21-6391-0360
E-mail: info@hioki.cn

3403E2-5YE Printed in Japan

All information correct as of Nov. 29, 2005. All specifications are subject to change without notice.