Elevator Speedometer
EC-2100

Robust and high performance

- Analog output function
- Maximum value hold function
- Memory function
- Display of remaining battery level
- Auto power off function
- Wide measurement range up to 2,000 m/min
- Distance measurement function (option)
- Selectable measurement unit (mm or feet)

External detector EC-0201 (option)

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As well as elevator speed, the EC-2100 also measures actual moving distance of an escalator after emergency stop operation.

The EC-2100 is a compact, light weight and robust handheld speedometer designed for use in elevator adjustment, maintenance and inspection. It measures speed only by pressing a circumferential ring lightly to an elevator pulley or a handrail of an escalator. Distance also can be measured as an option.

**New functions!**

1. **Memory function**
   - Up to ten measurement results can be stored to the main unit. Selected measurement item and unit are lit up.

2. **Analog output function**
   - The voltage output with 0 to 1(V) is useful for data recording and graph creation on other secondary devices. F.S. setting can be freely made depending on the measurement object.

3. **Maximum value hold function**
   - This function can hold the maximum value during measurement. The latest update value is displayed. It can be used with the external hold function.

4. **Averaging function**
   - This function enables averaging of speed (m/min) and rotation speed (r/min). The number of averaging times can be set up optionally from 1 to 200.

5. **Display of remaining battery level function**
   - This function provides against running out the battery on site.

6. **Auto power off function**
   - A delay of three minutes after last button operation or signal input lets the EC-2100 automatically turn the power off for saving battery.

7. **Distance measurement function EC-0202 (option)**
   - The EC-0202 measures moving distance within the specified time. Plus/minus display shows the rotation direction. (Can be set up freely.)

**Improved performance!**

1. **Wide measurement range and higher-speed measurement**
   - The measurement range of rotation is twice as many as the EC-900* (up to 2,000m/min), and only 1/10 calculation time of the EC-900* is required to save calculation time.

   * EC-900: previous model of ONO SOKKI.

2. **Applicable to CE marking**
   - Noise-immune design to make accurate measurement even under strong noise environment.
For measurement of both an escalator and an elevator by the EC-2100!

**Applications**

- Speed measurement of an elevator
- Moving distance measurement of an escalator after emergency stop operation

**Specification**

**EC-2100 Elevator Speedometer**

- **Measurement range**: Speed* 0.1 to 20,000 (m/min) or 1 to 6,500.0 (f/min)
- **Rotation speed**: 0 to 20,580 (r/min)
- **Distance (measured separately)**: 0 to ±999 (mm) or 0 to ±3,280 (feet)
- **Measurement accuracy**: ±1 count (not including errors due to shaking or slipping of the contact part)
- **Measurement time**: 10ms
- **Display**: 5-digit red LED (upper and lower display), 7-segment
- **Update time**: 10ms
- **Resolution**: 0.1 (m/min) or 0.328 (f/min), 0.1 (r/min)
- **Measurement unit**: m/min, r/min, mm or feet
- **Power supply**: Type AA battery × 3 pieces

**EC-2021 External detector**

- **Operating temperature range**: 0 to 45°C
- **Storage temperature range**: -10 to 60°C
- **Weight**: Approx. 423g (including batteries, not including circumferential ring)
- **Bearing life**: 2 × 10⁷/min-h (at the time of maximum load within the specification)

**EC-0203 Trigger unit**

- **Connecting section**: Connector Connection to the EC-2100 elevator speedometer (EC-0203)
- **Bearing life**: 2 × 10⁷/min-h (at the time of maximum load within the specification)

**Example of measurement results**

When a leftward movement of a handrail is set as +

- (moved to the left 123mm) (moved to the right 123mm)

Moving distance of an escalator after emergency stop can be measured by pressing a circumferential ring to a pulley of governor or a rope. The instantaneous values are displayed by using the hold switch [1][2] on the main unit or using an external hold signal.

**Memory of the measurement results**

The EC-2100 has memory function to store the measurement results to the main unit. The data of CH1, CH2 and MAX value are stored in rotation measurement (m/min, r/min), and the measurement value, sign and rotation direction in distance measurement (mm). The stored data can be read in the setting mode by [MENU] switch.

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- **Outer dimensions** (unit: mm)
  - Reflective mark x 1 sheet
  - High accurate zebra pattern
  - KS-200 Circumferential ring x 1
  - KS-300 Rotating contact tip x 1
  - HT-0502 Contact adapter x 1
  - Accessories

Options

- Circumferential ring (wide type)
  - KS-400
- Circumferential ring (narrow type)
  - KS-500
- Circumferential ring (rubber coating wide type)
  - KS-0800
- Rotating contact tip
  - KS-300
- Relay shaft for rotating contact tip
  - EC-0924
- External hold signal detection switch
  - EC-001A

EC-0201 External detector

- **Outer dimensions** (unit: mm)

EC-0203 Trigger unit

- **Outer dimensions** (unit: mm)

Offering a good solution for measuring the opening and closing door speed

HT-5510
digital handheld speedometer

The HT-5510 Digital Handheld Speedometer measures opening and closing door speed and its time, such as an elevator, a train or a safety fence. An accurate zebra pattern reflective mark is attached to measure the speed, and a reflective mark to measure the time. It is also used for measurement of general rotating objects. Data recording is available on a data logger using analog output and pulse output.

Measurement examples

- Measuring speed of opening and closing door
- Measuring time of opening and closing door
- Measuring general rotating objects

- Mounting fixture
- Accessories

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URL: [http://www.onosokki.net](http://www.onosokki.net)