The U-WAVE system enables easy wireless data communication from a measuring tool to a PC using the digimatic protocol. Measurement efficiency is improved by eliminating the long and cumbersome data cables. The user-friendly interface allows data to be loaded into any software product that accepts keyboard input, such as Excel® or Notepad.

1. **U-WAVE-R**
   - Model: U-WAVE-R
   - Order No.: 02AZD810D*
   - Power supply: USB bus power system

   **Major Specifications of U-WAVE-R**
   - Number of U-WAVE-R units that can be connected: Up to 16
   - Number of U-WAVE-T units that can be connected: Up to 100
   - External dimensions: 5.51" x 3.15" x 1.24"
     (140 x 80 x 31.6 mm)
   - Mass: .29 lbs (130g)

2. **U-WAVE-T**
   - Model: U-WAVE-T (IP67 model)
   - Order No.: 02AZD730D*
   - Model: U-WAVE-T (Buzzer)
   - Order No.: 02AZD880D*

   **Major Specifications of U-WAVE-T**
   - Protection Rating: IP67
   - Data reception indication: LEDs
   - Power supply: Lithium battery CR2032×1
   - Battery life: Approx. 400,000 transmissions
   - External dimensions: 1.73" x 1.17" x .73"
     (44 x 29.6 x 18.5 mm)
   - Mass: .05 lbs (23g)

*Detailed information on conformity standards of wireless communication specification is given below.

### Installation Bracket Kit
Order No. 02AZE200

### Specifications of wireless communication

<table>
<thead>
<tr>
<th>Conformity standards</th>
<th>Wireless standards</th>
<th>Wireless communication distance</th>
<th>Transmission output</th>
<th>Modulation method</th>
<th>Communication frequency</th>
<th>Used band</th>
</tr>
</thead>
</table>
| European conformity standards* | Conform to IEEE802.15.4 | Approx. 60ft (within visible range) | 1 mW (0 dBm) or less | DS-SS (direct sequence spread spectrum) | 2.4 GHz band (ISM band: universal frequency) | 15 channels (2.405 to 2.475GHz at intervals of 5MHz) The noise search function can avoid interference with other communication devices.

*Japan conformity standards: ARIB STD-T66

### Dimensions of Each Part

<table>
<thead>
<tr>
<th>Unit: mm</th>
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</thead>
<tbody>
<tr>
<td>U-WAVE-T</td>
</tr>
<tr>
<td>Device ID label</td>
</tr>
<tr>
<td>Certification label</td>
</tr>
<tr>
<td>Connector cover</td>
</tr>
<tr>
<td>Battery cover</td>
</tr>
<tr>
<td>LED display</td>
</tr>
</tbody>
</table>

| U-WAVE-R |
| Device ID label |
| Certification label |
| POWER (green LED) |
| ERROR (red LED) |

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*Conformity standards:
*EN 50371:2002
*EN 300 440-1 V1.3.1
*EN 300 440-2 V1.1.2
*EN 301 489-01 V1.6.1
*EN 301 489-03 V1.4.1
*U.S.A. conformity standards:
*47 CFR Part 15.247 (Subpart :C)
*47 CFR Part 15 (Subpart :B)
*Canada conformity standards:
*RSS-210 (Issue 7)
*RSS-Gen (Issue 2)
*ICES 003 (Issue 4)

*European conformity standards:
*EN 50371:2002
*EN 300 440-1 V1.3.1
*EN 300 440-2 V1.1.2
*EN 301 489-01 V1.6.1
*EN 301 489-03 V1.4.1

Note: In accordance with wireless regulations the use of this product is permitted in Japan, Europe (a total of 32 countries including 27 EU members, 4 EFTA members and Turkey), U.S.A., and Canada. This product must not be used in other countries or areas. This product is not compatible with the conventional Mu-WAVE, for which communication specifications are different.

*Japan conformity standards: ARIB STD-T66
U-WAVE

Measurement Data Wireless Communication System

List of U-WAVE-T Connecting Cables
Select one from cables A to G, referring to the part number of connecting cable for wired connection in your measuring tool catalog or manual. If you are unsure which cable is appropriate, check the cable connectors, the shapes of terminal on the measuring tool side, or the codes of compatible measuring tool for cables A to G below.

It is not possible to connect to EF and EH counters.

When connected with U-WAVE-T
Select one of the USB input tool direct from table below to fit the connector (A to G) and also select either standard type (fig.1) or foot switch type (fig.2) dependent on usage.

Note: Not connectable to these Mitutoyo products: Litematic VL, Linear Gage Counter EF/EH, Surf test SJ-500.

Reference Order No.

<table>
<thead>
<tr>
<th>Type of connecting cable</th>
<th>Order No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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</thead>
<tbody>
<tr>
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<td>05CZA624</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
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</tbody>
</table>

Cable type

- A: Water-proof model with output button
- B: Water-proof model with output button
- C: With data-out button type
- D: 10-pin plain type
- E: 6-pin round
- F: Plain type straight
- G: Plain type straight water-proof model

Connector shape on the measuring tool side

- Light gray

Socket shape on the measuring tool side

- [Digimatic Caliper]
- CD67-S, PM
- CD-PMX
- CD-PM/GM
- CDC-P, PMX
- CFC-G/GX/G/GU
- [Digimatic Caliper]
- NTD-PMX
- [Digital Scale and DRO Systems]
- VDS-PMX
- [Digital Scale and DRO Systems]
- SD-G

Codes of major compatible measuring tools and instruments

- [Digimatic Micrometer]
- MDE-MJ
- MDC-MJ/MJT
- [Digimatic Micrometer]
- CD-CX/C
- [Digimatic Micrometer]
- CD-CX/C
- [Digimatic Micrometer]
- CDN-CX/C
- [Digimatic Micrometer]
- NTD-CX/C
- [Digimatic Micrometer]
- VDS-DCX
- [Digital Scale and DRO Systems]
- SD-D, SDV-D
- [Digimatic Indicator]
- ID-H/F
- [Linear Height]
- (Linear Height)
- QMH-S
- [Linear Gage/Counter]
- EB, EC-D
- [Micro-switch]
- [Micro-checker]
- [Reference Gage]
- [Hardness Testing Machines]
- [Hardness Testing Machines]
- [Hardness Testing Machines]
- [Hardness Testing Machines]
- [Portable Hardness Testing Instruments]
- [Portable Hardness Testing Instruments]

Note on Wireless Communication Environment

Although the communication range for U-WAVE is approximately 60 ft. line-of-sight, performance may be affected by obstacles or environmental factors.

Cautions

- Safety caution:
  Do not use this device near medical equipment that might malfunction due to radio interference.

- Caution on radio law:
  This device is certified as a 2.4 GHz band wide-band low-power data communication system based on the radio regulations in Japan, Europe, U.S.A. and Canada. It is prohibited by law to disassemble or modify this device or peel off the certification label from it.

<table>
<thead>
<tr>
<th>Item</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete wall</td>
<td>Communication is not possible in a completely enclosed room.</td>
</tr>
<tr>
<td>Metal partition</td>
<td>Communication speed may drop or communication may be interrupted.</td>
</tr>
<tr>
<td>Wireless LAN</td>
<td>Communication speed may drop or communication may be interrupted. Maintain the set frequency and installation distance if at all possible.</td>
</tr>
<tr>
<td>Medical instrument</td>
<td>Do not use this product near a medical instrument such as a laser knife or electronic scale.</td>
</tr>
</tbody>
</table>