

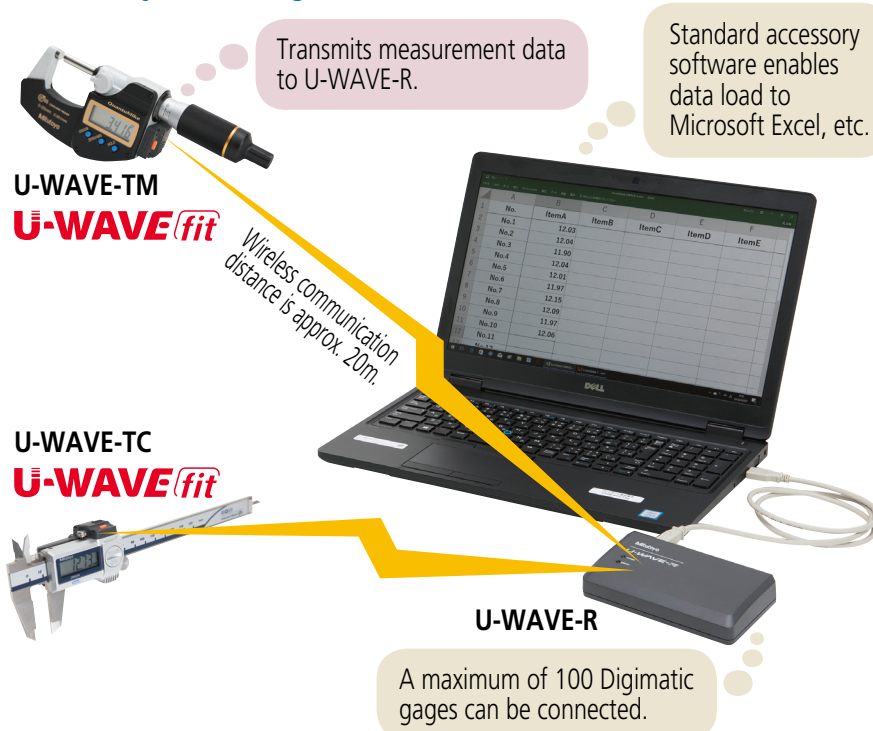
Measurement Data Management

Convenient data collection tool and quality control software

Measurement data wireless communication system U-WAVE-TC / TM (U-WAVE fit)

- Data from tools with Digimatic output function can be sent to a PC via wireless communication.
- With functions and performance inherited from U-WAVE-T, the compact and thinner design provides better fitting to an instrument and improved operability, which enables further improvement of efficiency.
- The data interface function of the U-WAVE-R standard accessory software enables data input to commonly available software (Microsoft Excel, Notepad, etc.) by keyboard input.
- USB-ITPAK V2.1 supports U-WAVE!
Loading multiple measurement data into separate Excel sheets, or simultaneous measurement using the special event drive is now available without the need for macro programming yourself. (Automatic loading in a certain interval is available with a timer function.)

U-WAVE fit system configuration



U-WAVE fit (U-WAVE-TC / TM) System Communication Specifications

• Wireless communication

Wireless specifications	IEEE802.15.4 base
Wireless communication distance	Approx. 20 m (line of sight)
Wireless communication speed	250 kbps
Transmission output	2.5 mW (4 dBm) or less
Modulation method	DS-SS (Direct Sequence - Spread Spectrum) Resistant to interfering signals and noise
Communication frequency	2.4 GHz band (ISM band: Universal frequency)
Used band	15 channels (2.405 to 2.475 GHz at intervals of 5 MHz) The noise search function avoids interference with other communication devices.

Use of U-WAVE is allowed in the following countries:

This product is a radio equipment classified in the 2.4 GHz Wide-band Low Power Data Communication System.

To use this product, conformity to the radio law of each country is required.

For use in countries other than those below, please contact your dealer or nearest Mitutoyo sales office.

To use in countries other than the country where you purchased the product, please contact your dealer or nearest Mitutoyo sales office.

Applicable models	264-620/1/2/3
Asia	Japan, China, Vietnam
North America	US, Canada
Europe	28 EU member nations (UK, France, Germany, Italy, Netherlands, Belgium, Luxembourg, Spain, Portugal, Austria, Sweden, Finland, Denmark, Bulgaria, Cyprus, Czech Republic, Slovakia, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Croatia) 4 EFTA member nations (Norway, Switzerland, Iceland, Liechtenstein) and Turkey

As of August, 2018

1 U-WAVE-R

Receives data from U-WAVE-TC / TM and loads to a PC via USB.

Model	U-WAVE-R
Order No.	02AZD810D
Power supply	USB bus power system
Number of U-WAVE-R units that can be connected to one PC	Up to 15
Number of U-WAVE-T units that can be connected	Up to 100
External dimensions	140×80×31.6 mm
Mass	130 g

U-WAVEPAK software (standard accessory)

System Environment: Compatible OS

Windows 2000 Professional (SP4 or later)*
Windows XP Home Edition (SP2 or later)*
Windows XP Professional (SP2 or later)*
Windows Vista*, Windows 7*, Windows 8/ 8.1*
Windows 10*

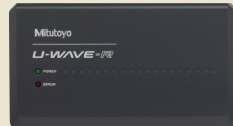
* Revision history (U-WAVEPAK)

Ver1.010 or later is compatible with 32/64-bit OS.
Ver1.020 or later is compatible with Windows 8.
Ver1.021 or later is compatible with Windows 8.1.
Ver1.022 or later is compatible with Windows 10.

Main specifications

- Setup of dedicated driver software (USB and virtual COM port)
- Initial setting of ID number and frequency selection (required only once for the first time)
- Load data to Microsoft Excel or Notepad through the data interface function
- Note: Cannot be connected to a device other than a PC (such as DP-1VA LOGGER, PDA, or controller).

U-WAVE-R main unit



USB2.0 cable (1m) attached

U-WAVEPAK



Refer to the U-WAVE Catalog (No. E12000) for more details.

Applications



Measurement data wireless communication system U-WAVE-TC / TM (U-WAVE fit)

Type of transmission unit



264-622



264-621

SPECIFICATIONS

Transmits measurement data to U-WAVE-R. Select IP67 or buzzer model according to your application.

Connectable measuring instruments	Micrometer		Caliper		
	Order No.	264-622	264-623	264-620	264-621
Model	U-WAVE-TM (IP67 type)	U-WAVE-TM (Buzzer type)	U-WAVE-TC (IP67 type)	U-WAVE-TC (Buzzer type)	
Protection Rating	IP67	N/A	IP67	N/A	
Data reception indication	LEDs	Buzzer and LEDs	LEDs	Buzzer and LEDs	
Power supply	Lithium battery CR2032×1				
Battery life	Approx. 400,000 times continuous data transmission				
External dimensions	41.9×12.9×38.8 mm		56×11.45×30.4 mm		
Mass	18 g				

Note: IP67 model is water/dust-proofed suitable for the factory floor.



02AZF310



02AZF300

Fixed to transmission unit and inserted into output connector of digimatic gage

Order No.	02AZF310	02AZF300
Protection level	IP67	N/A
Mass	6 g	
Connectable transmission unit	U-WAVE-TM/TC (IP67 type)	U-WAVE-TC (Buzzer type)

Compatibility of measuring tool and unit

Digimatic gage		Assembled appearance (Front / Back)	Connecting unit	Transmission unit
Micrometer	Standard			U-WAVE-TM (Buzzer type) 264-623 U-WAVE fit
	Water/dust-proof type			U-WAVE-TM (IP67 type) 264-622 U-WAVE fit
Caliper	Standard			U-WAVE-TC (Buzzer type) 264-621 U-WAVE fit
	Water/dust-proof type			U-WAVE-TC (IP67 type) 264-620 U-WAVE fit