

## U-WAVE

Wireless data transmission system  
for calipers and micrometers



SMALL TOOL INSTRUMENTS  
AND DATA MANAGEMENT



**Mitutoyo's newly developed wireless transmitter placed on the back side of calipers and micrometers, specially designed not to interfere with the measurement.**

- The external dimensions of the transmission unit are smaller than the display module.
- Approx. 20 m (within visible range)
- ZigBee specification: 2,4GHz wireless system for reliable and secure data transmission
- Easy data export to Microsoft® Excel® or other professional SPC software applications
- Transmitter confirms data transfer by a buzzer sound or a red/green LED signal.
- An IP67 transmitter is available.
- Low power consumption: 400.000 data transmissions with a single battery



IP65 Micrometer with U-WAVE-TM (buzzer type) and connection unit



Standard caliper with U-WAVE-TC (buzzer type) and connection unit



Left: U-WAVE-TC with connection unit  
Right: U-WAVE-TM with connection unit

**Specifications**

Wireless communication protocol	IEEE 802. 15. 4
Modulation method	DS-SS (Direct Sequence Spread Spectrum)
Communication distance	Approx. 20 m (within visible range)
Communication speed	250 kbps
Communication frequency	2,4 GHz conform to ZigBee (ISM: universal frequency band)
User band	15 channels (2,405 to 2,475GHz at intervals of 5 MHz)
OS compatibility	Windows® 2000 Professional (≥SP4), Windows® XP Professional (≥SP2), Windows® XP Home Edition (≥SP2), Windows Vista®, Windows® 7 (32bit, 64bit), Windows® 8, 8.1, 10 (32bit, 64bit)

**U-WAVE-T (Transmitter)**

No.	Model	Measuring Instrument*	Remarks	Data reception indication	Battery Life (CR-2032 Battery)
264-620	U-WAVE-TC	100, 150, 200, 300 mm IP67 caliper/standard caliper	IP67 type	LED	400.000 transmissions
264-621	U-WAVE-TC	100, 150, 200, 300 mm IP67 caliper/standard caliper	Buzzer type	Buzzer/LED	400.000 transmissions
264-622	U-WAVE-TM	COOLANT PROOF (IP65) micrometer	IP67 type	LED	400.000 transmissions
264-623	U-WAVE-TM	COOLANT PROOF (IP65) micrometer	Buzzer type	Buzzer/LED	400.000 transmissions
02AZF310	Connection unit	IP67 caliper/COOLANT PROOF (IP65) micrometer	Waterproof type	–	–
02AZF300	Connection unit	Standard caliper	Standard type	–	–

\* Please contact Mitutoyo or distributor for further details

**U-WAVE-R (Receiver)**

No.	Remarks	Software	Number of U-WAVE-R units that can be connected to PC	Number of U-WAVE-T units that can be connected	USB cable length [m]	Dimensions (WxDxH) [mm]	Mass [g]
02AZD810D	U-WAVE-R + software	U-WAVE PAK	Up to 16	Up to 100	1	140 x 80 x 31,6	130



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