

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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