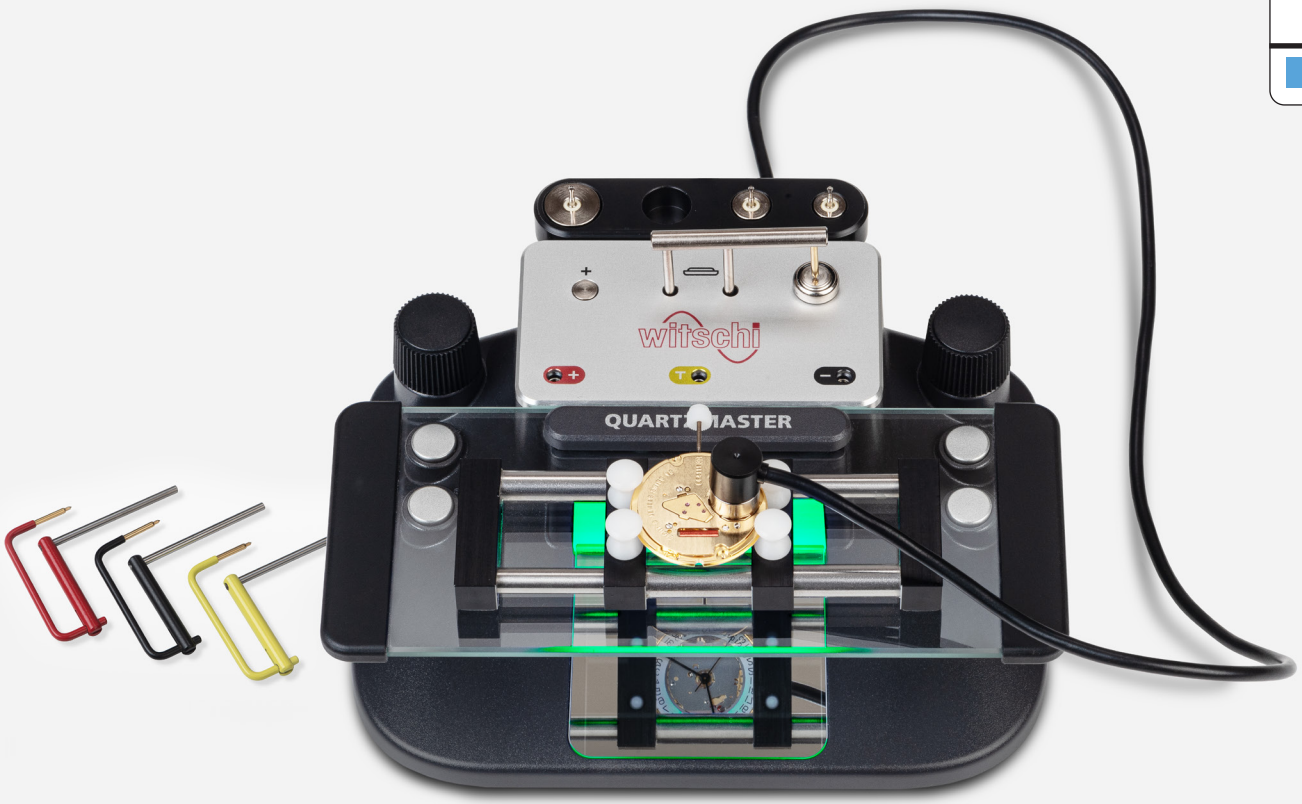
QuartzMaster®



QuartzMaster, the expert in the measurement of open quartz watches!
QuartzMaster offers an extensive range of measurement and testing options for the analysis of open quartz watches and the battery. Thanks to its quick, accurate measurement procedures, not only is it indispensable for service and production, but also an important measuring instrument in the watch laboratory.

User-friendly and compact
This compact measuring device is connected to the display unit via a USB interface. With its freely configurable keys and rotary knobs, three practical contact brackets and the ingenious watch movement holder, testing is trouble-free. And thanks to the optional dummy battery, the watch is quick and easy to connect to the measuring device.

Automated measurement sequences with WiCoTRACE
With WiCoTRACE test parameter and measurement results management, automated measurement sequences can easily be created and managed centrally. The clearly laid-out application in WiCoTRACE supports an efficient test procedure.

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witschi
LEADING SWISS PRODUCTS

QuartzMaster®

QuartzMaster

- Compact and ergonomic measuring device for open quartz watches
- Plug & Play thanks to USB interface
- Battery tester with load resistances of 100 Ω, 2 kΩ and 2 MΩ
- Easy to operate thanks to configurable rotary knobs and keys on the device
- Suitable for both left- and right-handed users
- Dedicated, yellow bracket for the accelerated measurement
- Dummy battery for rapid connection of the watch to the measuring device (optional)
- The lighting for improved readability of the watch hands changes colour depending on the result and device status
- A mirror enables the user to see the hands from the working position
- WiCoTRACE software with automated measurement sequences and direct measurement mode

	QuartzMaster	QuartzMaster PRO
Battery measurement	•	•
Movement measurement: Current and motor pulses (pulse duration and chop ratio), rate deviation with and without inhibition step, coil resistance, minimum operating voltage as well as automatic determination of the end-of-life voltage (EOL), optionally in accelerated mode	•	•
Automated measurement sequences with WiCoTRACE	•	•
Direct measurement mode with numerical display	•	•
Direct measurement mode with graphical display		•
Detailed graphic display of the motor pulses		•
Rate deviation via quartz frequency (32 kHz)		•
Pulse generator		•

General

Operation	Push rotary knobs, keys
Compatible display units	Windows PC Windows tablet
Interfaces	1x USB Type A (Type C device) 1x dummy battery compartment
Dimensions	142 x 53 x 104 mm (W x H x D) without contact bracket
Weight	430 g
Dummy battery (optional)	Suitable for the common battery diameters 5.8, 6.8, 7.9, 9.5 and 11.6 mm

Measurement

Measurement principle	Current measurement with variable supply voltage, as well as battery measurement
Speed	-300 to +300 s/d (0.1% ± 0.03 s/d)
Voltage	0 to 3.5 V (0.5% ± 10 mV)
Current	0 to 20 mA (2% ± 2 nA)
Motor pulse	0 to 100% (± 10%)
Pulse duration	0 to 20 ms
Resistance	10 Ω to 1 MΩ (2% ± 5 Ω)

Measuring conditions

Measurement time	2 s to 16 min
Power supply	0 to 3.5 V
Time base	OCXO (± 0.026 s/d)
Ambient conditions	Temperature: 10 - 40 °C Relative humidity: max. 80 %

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Technical specifications subject to change without notice.

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