

Chronoscope® C1



Chronoscope C1, versatile, compact measurement amplifier

The Chronoscope C1 facilitates the use of customer-specific sensors for the measurement of mechanical watches. The single-channel measurement amplifier analyses the analogue beat noise from the connected sensor and sends the digitised measurement values to a PC via USB interface.

Varied range of specialised measurement sensors

Witschi's many years of experience enable it to find a solution for every measurement activity, such as sensors for use in extreme environmental conditions (temperature or magnetism), sampling microphones for special supports, and receivers for integration into automated systems.

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- Single-channel compact measurement amplifier
- Connects to customer-specific sensors for the acoustic measurement of mechanical watches
- USB interface for data transfer to a Windows PC or the terminal
- Variety of measurement sensors available
- Customer-specific receivers available on request
- High-quality measurement electronics with Witschi W4 technology
- Simple calibration via the USB-C interface

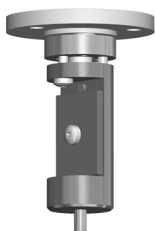
Microphone varieties (examples)

12.30.716H



Measurement of mechanical watches in pallet systems with measurement on the watch glass or calotte.

13.2311



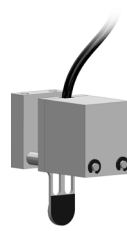
For integration into industrial applications with tight space constraints.

13.2314 (long)
13.2316 (short)



Measurement on the watch glass or calotte through a small opening in closed watch boxes.

13.2020



Extra-thin microphone for measuring the beat noise on the watch crown.

13.2312



For the use in strong magnetic fields of up to 15'000 Gauss (1.5 Tesla).

12.30.719G



Microphone for measuring the beat noise on the watch's winding stem.

General

Display units	Windows PC Windows tablet
Software	Chronoscope Service
Languages	German, French, English Spanish, Italian
Interfaces	1x Lemo 1x USB C
Dimensions	122 x 31 x 50 mm (W x H x D)
Weight	140 g
WiCoTRACE	yes

Measurement

Measurement channels	1
Rate	-99.99 ... +99.99 s/d ± 0.01 s/d
Amplitude	80 ... 360° ± 0.1°
Beat error	0 ... 9.9 ms ± 0.1 ms

Measurement conditions

Stabilisation time	Manual
Amplification control	Adjustable, 1 ... 4
Measurement time	Manual, 2 s ... 300 h
Beat number	Automatic and manual, 18'000 ... 72'000 A/h
Lift angle	Adjustable, 10 ... 90°
Time base	TCXO (± 0.004 s/d)