

# Chronoscope C20



## **Chronoscope C20, versatile measurement amplifier with 20 channels**

The Chronoscope C20 facilitates flexible, customer-specific solutions for the simultaneous measurement of up to 20 mechanical watches. Designed as a 19-inch rack solution, the high-quality measurement amplifier analyses the analogue signals from the measurement sensors and sends the digitised measurement values to a PC via USB interface.

## **Versatile measurement solutions**

The Chronoscope C20 is the ideal measurement amplifier for the Chronoscope CT 10-channel measurement system. Customer-specific measurement solutions are also possible, such as the integration of measurement sensors into automated systems, and special sensors for extreme environmental conditions (temperature or magnetism).

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## Chronoscope C20

- Simultaneous measurement of mechanical watches across up to 20 channels
- Electronic measuring system for installation in 19-inch standard racks with USB interface for PC-based measurement analysis
- Variety of standard microphones and customer-specific receivers available
- Data transfer from the measurement sensors via a bus or individual connections
- Analogue preamplifier and amplifier with low-impedance technology for noise-free measurement
- Calibration interface on the front of the housing for rapid, simple calibration
- Simple calibration and firmware updates up to and including the measurement module
- Automation interface (Ethernet)

## Example applications: Temperature measurement

When combined with the stackable, 10-channel Chronoscope CT, measurements can be performed in a climatic chamber.



## General

Operation/display	5-inch multi-touch display
Software	-
Languages	German, French, English Spanish, Italian
Interfaces	1x D-sub (Chronoscope C20 D) 20x Lemo (Chronoscope C20 L) 1x USB B 1x Ethernet 1x power supply 120–240V~ 1x USB A (front)
Dimensions	483 x 133 x 375 mm (W x H x D)
Weight	7.25 kg
WiCoTRACE	yes

## Measurement

Measurement channels	20 (synchronous)
Rate	-99.99 ... +99.99 s/d $\pm$ 0.01 s/d
Amplitude	80 ... 360° $\pm$ 0.1°
Beat error	0 ... 9.9 ms $\pm$ 0.1 ms

## Measurement conditions

Stabilisation time	Manual
Amplification control	Adjustable, 1 ... 4
Measurement time	Manual, 2 s ... 300 h
Beat number	Manual, 18'000 ... 72'000 A/h
Lift angle	Adjustable, 10 ... 90°
Time base	OXC0 ( $\pm$ 0.004 s/d)