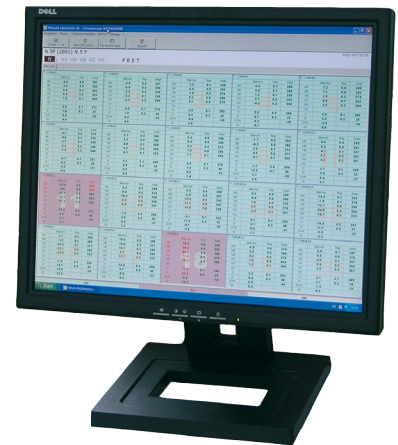


Chronoscope PC20



Test system for the simultaneous measurement of 20 mechanical watch movements

The Chronoscope PC20 is a versatile measuring system that can test a large number of mechanical watch movements in production lines. Up to 20 movements inside pallet can be placed. The identification of the movement and the storage of measurement results into a cen-

tral database ensure the tractability of all test steps. Graphical long term analysis up to 50 hours can also be performed.

The Chronoscope PC20 can be networked at any time into a WiCoTrace group of instruments.

Witschi Electronic Ltd

Bahnhofstrasse 26 – CH-3294 Büren a.A. – Switzerland
Tel. +41 (0)32 352 05 00 – welcome@witschi.com – www.witschi.com



Technical Data

Measurement possibilities

- **Standard measurement** Rate accuracy, amplitude and beat error of mechanical watches
- **Graphic analysis** Records up to 50 hour.
- **Interval measurement** Execution of the measurements in a definable interval during a certain period

Beat number

Adjustable for all beat numbers from 3600 to 43'200 A/h

Lift angle

Selectable from 10° to 90°

Stabilisation time

Selectable from 00:00 to 60:00 minutes

Measurement

Selectable from 00:00:02 to 50:00:00 hours

Test modes

- **Std** Standard mode for watches with Swiss escapement
- **Spe1** Mode for watches with coaxial escapement
- **Spe2** Mode for watches with AP escapement
- **Spe4** Mode with specific amplitude filter for watches with Swiss escapement

Signal gain

Selectable from 1 to 4

Measurement capability

Rate measurement (high resolution)

Measurement range: +/- 999.9 s/d (+/- 99.99 s/d)

Resolution: 0.1 s/d (0.01 s/d), accuracy +/- 0.1 s/d

Beat error

Measurement range: 9.9 ms, resolution 0.1 ms

Accuracy +/- 0.1 ms

Amplitude (high resolution)

Measurement range: 80° to 360°, resolution 1° (0.1°)

Accuracy: +/- 1.0°

Functions

20 microphones for movements inside pallet. Possible up to 6 measuring positions.

Details

The built-in electronic unit contains 20 measuring channels

Time base: Pre-aged and thermo-compensated high frequency quartz, OCXO

Stability: +/- 0.004 s/d between 10° and 50° C

Aging: for the first year max. +/- 0.03 s/d

USB interface for PC attachment.

Basic plate and casing: aluminium, silver.

Dimensions: 560x400x460 mm (w x h x d).

Weight: 60kg.

Connection to the mains:

- 230V~ (210 - 250 V~) 50/60 Hz (45 - 65 Hz). Mains with 10 A safety switch and connection to the protective ground

- 120V~ version on demand

Requirements of the PC

- Operating system: Windows 7, Windows 8 or Windows 10.

- Processor: at least i5

- RAM: at least 4 GB

- Hard disc: at least 128 GB

- CD/DVD writer: for database backup

- Interfaces: USB and Ethernet

- Graphic card: separate with at least 512 RAM

- Monitor: at least 19" with a minimum resolution of 1280 x 1024

Accessories

PC Dell with 19" TFT monitor, keyboard, mouse and Windows. 64.121x

Printer HP LaserJet. JB01-HP-LJET-ML

Label printer CT-S851 with USB interface JB01-CT-S851BK

Thermo paper for CT-S851 JB01-MM58-DPU20-N

Bare code reader Gryphon USB JB01-901651082