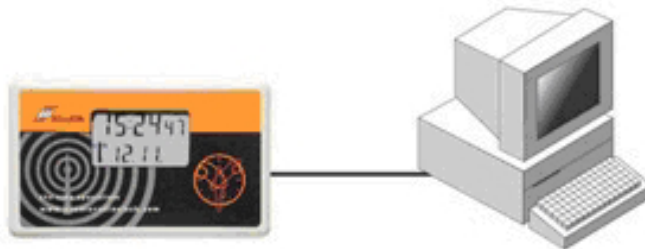


Atomic Clock



- Avoid fines by using the same current time in gas and electricity consumption control as your energy supplier
- Creates greater clarity by synchronizing the time on your process computer and your control server
- Accurate to within 1 second every 1 million years



For process control based on the exact current time

In countries where gas consumption contracts are used, it is vital to know the exact current time. This is because energy suppliers use the atomic clock time to determine a customer's consumption during each hourly or 24-hour period. If the process control time deviates from the atomic clock time, the consumption measured by your computer in each of these periods may differ from that measured by your energy supplier. That is why you need to frequently check whether the current time on both your process computer and the Synopta Server are still accurate. This can now also be done automatically with the new time synchronization unit for the Synopta Server.

HortiMaX
growing solutions



Atomic Clock

Hardware

The new time synchronization hardware for the Synopta Server consists of an aerial unit and a receiver unit, which are both connected to the Synopta Server through a RS-232 port. The aerial unit may be located up to 100 metres from the receiver unit. The aerial may be placed either inside or outside; although the signal quality inside may be inadequate in certain cases. If you are based on the European mainland, the most suitable place for the aerial inside is near a window facing east. This is because the transmitter unit is located in Germany.

Synchronisation

The accompanying NTP (Network Time Protocol) software makes sure that both the Synopta Server and the MultiMa process computer maintain the exact current time.

Background information on atomic clocks

Atomic clocks are the most accurate clocks in the world and are used by government agencies to define the exact current time. The atomic clock time is transmitted across Europe and North America by a number of radio transmitters and can be picked up by special long wave radio receivers. The radio transmitter in Mainflinger, Germany, transmits the time signal to the countries on the European mainland, for instance. A time synchronisation unit using the atomic clock radio signal is accurate to within 1 second every 1 million years.

More information?

For more information, please contact HortiMaX at +31 (0)15 362 03 00 or one of our dealers near you. You can also visit our website at www.hortimax.com.