Your Success is Our Goal

Synchronized time. Real time. Quality time.

Because you can't afford downtime:
SICLOCK – the time synchronization system from Siemens.

SIEMENS
Electronic Design and Manufacturing Services

Synchronized time. Real time. Quality time.
Maximum performance or high outage costs? All just a question of the correct time.

Why time synchronization is so important.

» Our plant shut itself down. Why? «

Imagine the following. Your safety system shuts down your plant. All production comes to a standstill. Every minute of downtime costs you money. And then you discover that every one of your plant components kept a different time. How will you find the original error? How can you confidently keep cause and effect apart? And what will it cost you?

» Isn’t there a simpler solution that could have prevented all this? «

» Our event archive should know what the time is everywhere! «

What would you do if you had to trace back particular errors in a highly complex production process, but you were unable to distinguish the cause of the error from the resulting errors because your event archive was not synchronized with each of the plant components. Now you are working against the clock and your outage costs are going up!

» Isn’t there a solution that will prevent that? «

There are a plenty of good reasons for implementing time synchronization in your application, too: losses due to production and plant failures can be minimized and errors traced back effortlessly. And it enables you to document and verify product quality.

As your experienced solution partner, Siemens can offer you an integrated complete solution for your synchronization problems – we will advise you, implement your technology solution, and service it throughout its life.

Our decades of experience and comprehensive know-how in technology and industry are the best credentials that our time synchronization system is dependable, extremely precise, and optimally adapted to your needs. Today and in the future.

Time synchronization with Siemens – for greater safety and reliability

The SICLOCK time synchronization system from Siemens

- reduces costs caused by production outages.
- increases the dependability and operating safety of your plant.
- increases the overall performance of your production facilities.
- ensures trustworthy error traceability.
- saves costs with optimized energy management.
- gives you the life-long benefit of our specific industrial know-how and wide range of services.
SICLOCK –
The system solution for your time synchronization

Plant wide.
Industry wide.
Worldwide.

The economic solution
SICLOCK makes a decisive contribution to smooth and economic operation of your plants and processes. SICLOCK not only helps you to reduce your outage costs when your plant fails by performing fast and reliable error analysis but, for example, will also save you hard cash by enabling more efficient energy management. Switch to the best rate with millisecond precision, in synchronism with your energy provider. SICLOCK secures long-term advantages for you. For example, benefit from the open SICLOCK system structure based on standards and optimally harmonized SICLOCK system components, eliminating problems when you expand in the future. Or benefit from our distinctive service and specific industrial know-how. We will be there whenever you need us, a life long.

The professional solution
All products from the SICLOCK product range are perfectly harmonized, modular, and parameterizable – which simplifies configuration and commissioning of your application. Everything from the radio clock for time synchronization of individual terminals such as a PC or PLC to the complete package for the time synchronization of large fault-tolerant plants – the SICLOCK system provides solutions for almost any application.

Complete solutions from a single source: as a “single-source supplier” we can offer you a full range of services for your SICLOCK system solution – throughout the lifetime of your SICLOCK application. Individual consulting, implementation, and service. For example, we will find the best location for your radio clocks and help you configure them: these are services that will help you tune your SICLOCK optimally to your needs.

The dependable solution
SICLOCK products meet all demands of reliable and safe time synchronization. They supply high-precision time information even under extreme working conditions.

The solution especially for routine industrial procedures
We have been providing solutions for our industry customers for years and know their special needs. Whether they are used in highly sensitive production processes, in power stations, or in plants with extreme radiated interference – all SICLOCK products have been developed for heavy industrial use. They will therefore ensure reliable operation even in the toughest operating conditions.

The individual solution
SICLOCK supports almost all common standards of time synchronization. So they can supply all the components in your plant with one and the same time signal. And concepts worked out once can easily be adapted to changing conditions. The time and money you save will help you to meet time and price constraints more easily.

The future-proof solution
The name Siemens and the continuous innovation of our products and services give you the security as a SICLOCK user that far in the future you will still be getting the optimum solution from a single source. Whether you expand or change your processes or production, move location, or alter your goals – you can carry on using the SICLOCK system that you purchased, we just need to change parameters. Future-proof and expandable. If need be: for life.
SSICLOCK radio clocks receive official time for you

The radio-controlled time synchronization solution for your components

SICLOCK system central clocks transmit the same time to all the components.

- **One time for all – without time jumps**
  Central time keeping and time distribution by the plant’s central clock ensures that all the components connected to your plant are always synchronized.

- **Always on beat – reliable without compromise**
  With the synchronization concept of SICLOCK with a central plant clock, all plant components draw the time from precisely one source. Even if the radio clock which synchronizes the central plant clock becomes faulty, internally your plant remains synchronized.

- **Simple adaptation to new needs**
  SICLOCK central plant clocks allow you to adapt your equipment to your individual requirements fast and at low cost with their many interfaces and simple device parameterization.

No additional programming or hardware required.

All outputs can be separately adapted to the requirements of your terminals.

All common Ethernet standards for time synchronization are also supported.

With such flexibility you can integrate all your terminals. Complicated and expensive special solutions for individual devices are history.

SICLOCK offers a wide range of radio clocks for every application, from low-cost receivers of official time transmitted by local transmitters (e.g. IRIG-B or DCF77) to GPS radio clocks that can be used anywhere.

- **The optimum solution for synchronizing individual components**
  With SICLOCK radio clocks, individual devices such as personal computers, servers, programmable controllers, or the central plant clocks, SICLOCK TM and SICLOCK TS, can be synchronized reliably and safely.

- **The package solution – plug & play!**
  For a whole range of standard solutions SICLOCK also offers packages – containing the radio clock plus the software that you need for your terminals. To guarantee you smooth and fast commissioning.

SSICLOCK radio clocks receive official time for you

The radio-controlled time synchronization solution for your components

SICLOCK central plant clocks distribute the precise time across your plant

The hardwired time synchronization solution for your plant

**Redundant SICLOCK system**
A redundant configuration ensures optimum availability for customers with extreme demands.

Do you need advice on the best position for your central receiver or sensor for your SICLOCK system? We will be there to support and advise you whenever you need us. We’ll visit your facilities and measure the interference to pinpoint the ideal position for the radio antenna of your SICLOCK solution. Just ask us!
Main areas of application:
- Automotive industry
- Power generation and distribution
- Metal, paper industries
- Plastics industry
- Oil, gas, water industries
- Petrochemical and chemical industries
- Food, beverage and tobacco industries
- Cement industry
- Pharmaceutical industry

• Whatever your business
Automotive or chemical industry, power generation or distribution, steel production, rolling mills or hydro power plants – SICLOCK is used with success in all areas of industry.

• Whatever your system
SICLOCK is certified for a wide range of systems and is the recommended choice for time synchronization. SIMATIC WinCC, SIMATIC PCS7, SIMATIC S7 fault recorders, and protective devices are only some examples of devices that can be optimally synchronized with SICLOCK. The varied range of patented parameterization capabilities of SICLOCK components guarantee shorter configuration times, lower commissioning costs, and maximum performance.

• Be prepared for the future
SICLOCK supports all common international standards such as GPS, DCF77, Ethernet, SNTP, IRIG, NTP, SNMP, Windows, etc. Giving you the secure knowledge that you will be able to use SICLOCK in a wide range of applications and reap the benefit of your investment for many years to come.

As your global partner for industrial solutions with years of experience in a wide range of different sectors, with SICLOCK, Siemens can offer you not only a high-performance and reliable product solution, but also comprehensive advice and service – from an analysis of your needs, to the planning and implementation of your ideas. And it doesn’t stop there. You can count on our special services, based on our solid know-how, adapted specially to your needs – over the entire lifecycle of your SICLOCK application.

The components for your success
- Radio clocks for GPS and DCF 77
- Central plant clocks SICLOCK TM and SICLOCK TS
- Pulse converters for electrical and optical time distribution
- Driver software
- Order packages for all the most common applications
- Accessories

Services across the board
We are your partner in all areas:
- Consulting
- Engineering
- Design
- Implementation
- Commissioning
- After-sales service
The information provided in this brochure contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.