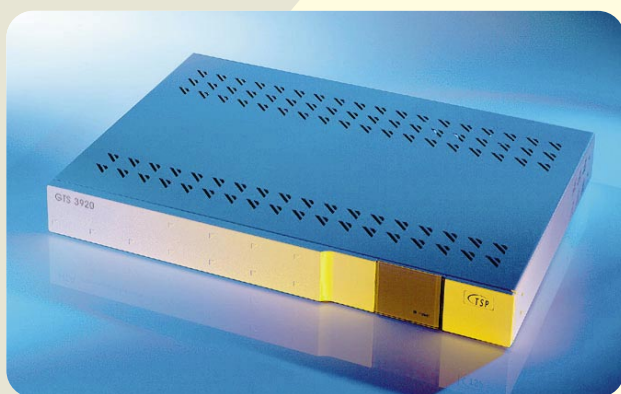


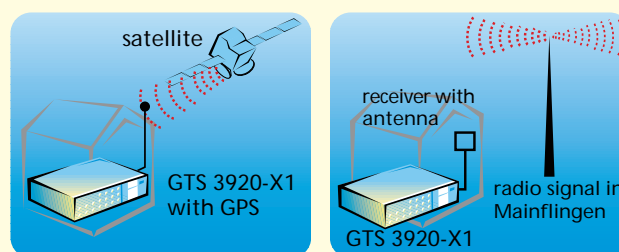
IT-Security Solutions

GTS 3920-X1 Global Time Server

Always the accurate time for all computer systems



The choice of the primary time source depends on the location and its local conditions.



Even though computer systems are equipped with their own Soft/Hardware clock, in the course of a day this internal time may deviate considerably from the actual time.

In a computer center with several systems it gets more and more important that all computer systems clocks are correct and, most of all, synchronized. In companies or offices attendance recording, for example, should tally for all employees - especially if there are different booking systems at different places.

The Global Time Server GTS 3920 is a totally reliable time source that regularly provides the correct time for all connected computer systems. GTS 3920 operation is possible all over the world.

Depending on customers' demands the changeover from summertime to wintertime is automatically done or GTS 3920 permanently supplies time protocols based on UTC (Universal Time Coordinated).

Global Positioning System GPS

The installation of the GPS upgrade kit into the GTS 3920 allows the worldwide reception of the clock signal. The GPS satellite system orbits permanently the earth and, thus is independent of regional-restricted, terrestrial radio clock transmitter. Only 3 visible satellites are sufficient for the GPS receiver to determine the correct local time. For this a relatively small antenna with a diameter of 10cm has to be installed in the open.

DCF 77 signal

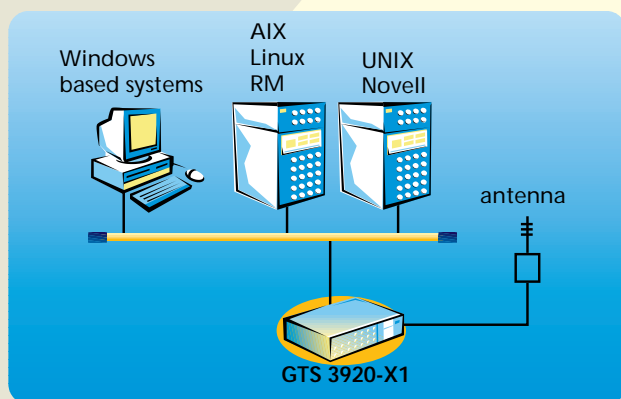
The integrated radio clock upgrade kit of the GTS 3920 enables the reception of time telegrams from the European transmitter DCF 77, as long as the permanent reception of radio signals is ensured.

Usually this is the case in a radius of approx. 1200 km of the transmitting station in Mainflingen near Frankfurt. In rare cases, the reception of signals may be affected by e.g. shielding or reflective buildings, nearby antennas.

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GTS Global Time Server

Automatically changeover from summertime to wintertime



Connection of the computer systems onto the GTS 3920 via LAN

The time supply via LAN is easily carried out by GTS 3920 because the GTS 3920 software compensates network run-times within the LAN. For popular LAN technologies, appropriate LAN transceiver modules are available. The LAN time information is transmitted through the NTP protocol (Network Time Protocol).

For time synchronisation a NTP-Client-Software installed on the computer system is necessary. The software receives the time information sent by GTS 3920 through the NTP protocol and synchronizes the Software/Hardware clock of the specified computer system. The appropriate NTP-Client Software for specific computer systems is available at TSP. Computer systems equipped with their own NTP-Clients can also be synchronized by the GTS 3920.

Technical Data

Time sources

- GPS upgrade kit
- Radio clock upgrade kit for reception of the DCF77 signal

Interfaces to the computer systems

- LAN connection
UTP 10 Mbit/s, BNC 50Ω, for LAN with TCP/IP protocol, all computer systems with NTP-Client Software
- ATOP 3925, ATOP 3925-X1

Configuration/Diagnostics interface

V.24a (VT100 terminal or higher, 97801 terminal or higher, PC with terminal emulation), incl. connecting cable

Dimensions

Height	85 mm
Width	435 mm
Length	310mm

Power connection

- 230 V AC, 100 VA, 47 ...63 Hz