

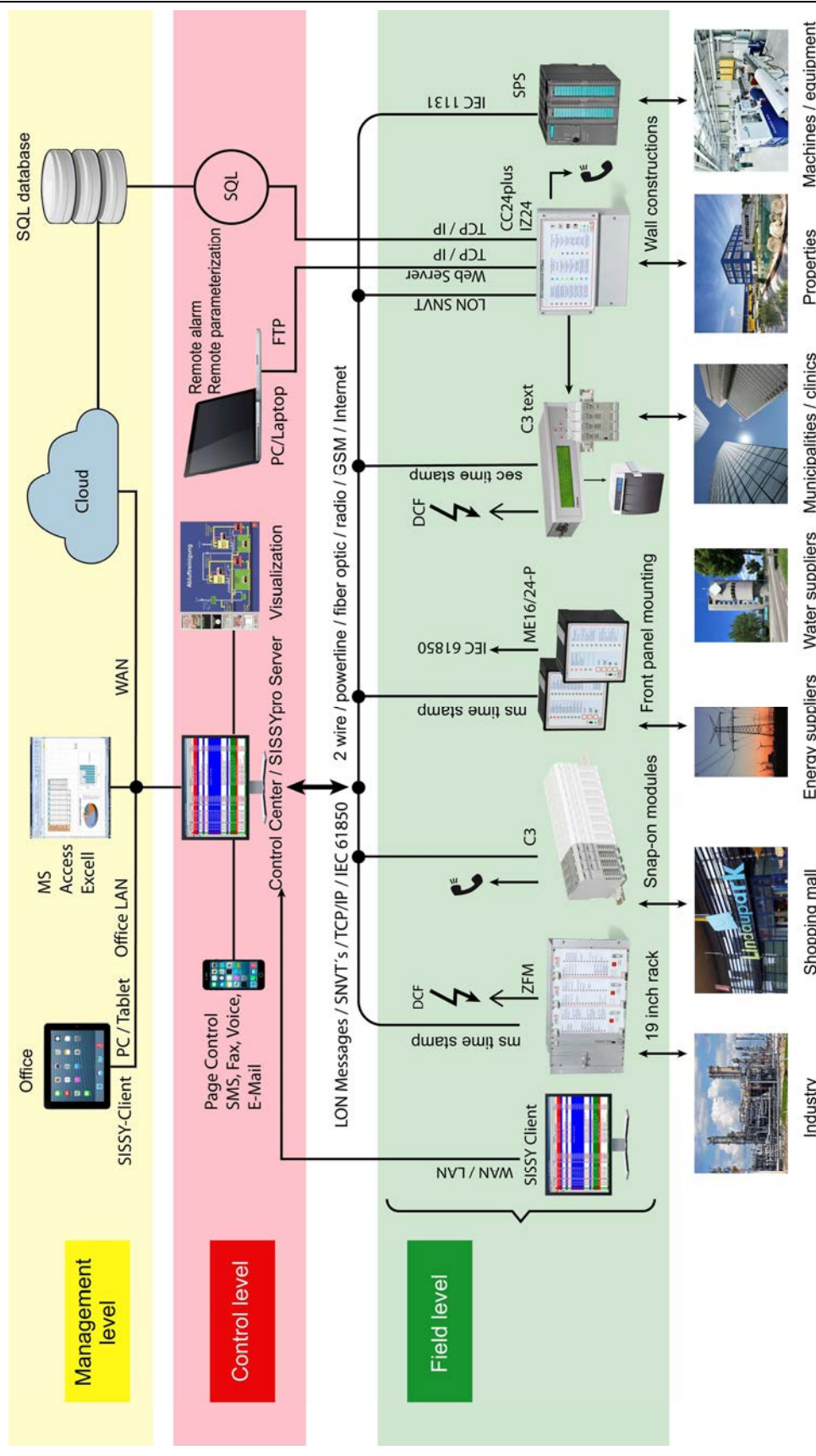


since 1971
the power to control

SISSYpro First-Value Annunciator System

Message detection chronologically with a resolution ≥ 1 ms for fast localization of the cause of the fault

Condition and Facility Monitoring



The intelligent monitoring system SISSYpro per the initial value-fault indicator and data collection in the millisecond range:

SISSYpro was originally designed specifically for the high demands of RUs area to monitor and enforce the electrical power supply. In addition to high EMC values a message detection $\geq 1\text{ms}$ was required regardless of the number of messages and also met for the first time from the beginning. Through continuous development, with OPC Server and SQL cloud connectivity to SISSYpro has developed into an intelligent cyber-physical communication system towards industry 4.0.

Particularly noteworthy is the wide and flexible needs of every system with high customer value in conjunction with the various decentralized network capable of substations UNITRO which also as an HMI modules are highly outsourced autonomous intelligence.

These intelligent modules capture and store the messages with a real-time time stamp with a resolution of $\geq 1\text{ms}$.

In a message log message then input message detection are transferred with message acknowledgment and elimination in chronological order in a real-time protocol to the control center and stored in a history list. The autonomous intelligence of substations also guarantees reliable monitoring locally even when connection problems to the control center, with storage of the data, even during a power failure and the possibility of then subsequent data transmission.

The traffic with the field level takes place via the fully transparent LON network via 2-wire, fiber optic, power-line, or LON over IP (DSL / GPRS) with remote parameterization. This remote programming also includes the text creation or amendment and the voice input to the respective substations.

Next are tools for remote maintenance such as TeamViewer, VNC etc. available.

On the expenditure side, a visualization enables visual communication. The Page Control package allows external communication via SMS, email, fax, and voice.

The central SISSYpro server in the control room can be expanded by client sub centers. Data exchange takes place via TCP / IP, so that the data collection and analysis for the server / client principle over a LAN to any number of PCs and / or tablets can be distributed.

The following are available as sub-stations:

- **ZFM 2378:** 19 "rack system for max. 512 messages with LED display
- **FME 32 C:** 19 "plug-in card 6U, 20M, 32 Binary inputs with millisecond resolution and LED display
- **C3:** DIN rail remote control system, Network ready (FT and PL)
- **ME16-P logic:** Front installation fault indicator for 16 messages
- **WindowsAnnunciator (WA):** front mounting fault indicators with **RGB display area** for max. 200 messages
- **C3text:** Front mounting plain text message system for 320 messages
- The integration of external **PLC systems** is also possible via an OPC client.

Through this universal and flexible options of the various sub-stations, the system has found the RU field addition in industry, as in the automotive industry, in large refineries and in the communal area a wide successful deployment.

Also in the facility area and the logistics allow different communications media and infrastructure coupled with the self-sufficient substations connecting and networking globally distributed property.

In all these areas can be achieved through effective monitoring, in particular in energy and utility facilities to increase the availability and reduce downtime of plant and equipment.

Overall, the system can SISSYpro by its complex and intelligent hardware and software components with a continuous vertical and horizontal networking, be assigned as a modern communication system of the group of cyber-physical systems.