

ST-CLOUD

THE PERFECT TOOL FOR DATA ANALYSIS AND PROCESS OPTIMISATION





Störk-Tronic develops and manufactures exclusively in Stuttgart and has been combining competence and innovation in the field of electronic measurement and control technology for more than three decades. We are specialised in tailormade, customised products and work modularly. This often results in solutions that can only be found in this form at Störk-Tronic.

Modular design

The concept of the ST-Cloud is also based on modular components and can therefore be created entirely according to your requirements. Together with the customer, we determine which modules are required for each project. In addition to the aspects mentioned on the right, this is also decisive in determining the costs for the ST-Cloud.

Development of the ST-Cloud

With this ST-Cloud brochure we would like to give you an insight into the requirements and dimensions under which a customer-specific version of the ST-Cloud can be created. The ST-Cloud is developed by engineers in Stuttgart, the headquarters of Störk-Tronic, and by engineers in Lyon, Störk-Tronic France. Only servers in Germany are used as data centres.

Cost factors

- · Number of modules
- · Data retrieval frequency
- · Volume of data retrieved
- · Complexity of Cloud modules
- · Data storage period
- · Number of users (accounts)



The ST-Cloud can be accessed both from computers and from mobile devices such as smartphones or tablets - at any time and from anywhere.

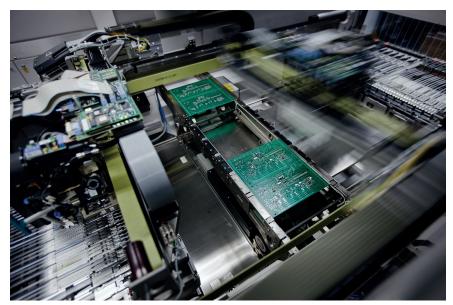
The quality claim at Störk-Tronic follows a simple formula: faultless products in any quantity. We owe this not only to our customers, but also to our heritage "Made in Germany". This is why we continuously invest in ultra-modern production facilities for an optimum manufacturing process and rely on seamless quality control at every stage of production. In addition, we can guarantee the premium quality of our controllers through the use of high-quality components.

Networking and communication capability through the ST-Bus

All newer controllers from Störk-Tronic are equipped with an ST-Bus. This enables them to be networked with the Commander and communicate with it. The Commander provides a gateway to the IoT. This is prerequisite for the ST-Cloud as data recorded by our controllers are transmitted via the Commander to the Cloud where it can be processed further.



Controllers with this symbol can be networked with the Commander via the ST-Bus.



As a pioneer in the field of networking electronic temperature control systems, Störk-Tronic introduced the Commander several years ago. Through experience and permanent feedback from our customers, the Commander has been continuously further developed. Today, numerous Commanders are used worldwide as "command centres" in various market segments such as commercial refrigeration, industrial cooling, food transport, medical technology, mechanical engineering, baking technology, commercial kitchen industry and frying systems.

Initial recordings can be made directly after commissioning

The Commander enables remote management and remote control of networked temperature control systems in the sense of complete temperature and data monitoring (e.g. according to HACCP). Up to 32 controllers can be connected to the Commander via the ST-Bus and thus controlled and parametrised directly via the touch screen. The user-friendly interface and self-explanatory, intuitive operation make long training sessions unnecessary.



Commander 43 and Commander 70

Two versions of the Commander with display are currently available: the Commander 43 and the Commander 70. Both can be used in different industries and have the same settings and highlights – but they differ in display format and some functions as well as in display technology. The Commander 43 is equipped with a resistive touch screen, while the Commander 70 has a large multitouch capacitive display.

ST-Studio

The ST-Studio software package enables the operation, adjustment and parametrisation of individual controllers via a company's own network or the Internet. Optimised data sets can be imported in a convenient way. ST-Studio is permanently in dialogue with one or more Commanders via local networks or the Internet. It then reports any malfunctions in the system.

Commander Box

With the Commander Box, Störk-Tronic also offers a cost-effective alternative. Also, up to 32 controllers can be managed, but in contrast to the Commander 43 or Commander 70, the Commander Box has no display; visualisation is via a web interface or ST-Studio. Configuration can also be carried out via a web interface or via ST-Cloud.



The new "Cloud-Connect" function in the Commander establishes the connection to the ST-Cloud. All that is required is a network connection with access to the Internet.

After the Commander has logged on to the ST-Cloud, the connected systems can be accessed in their full functional scope with any Internet-capable device such as a PC, laptop, tablet or smartphone.

Grouping

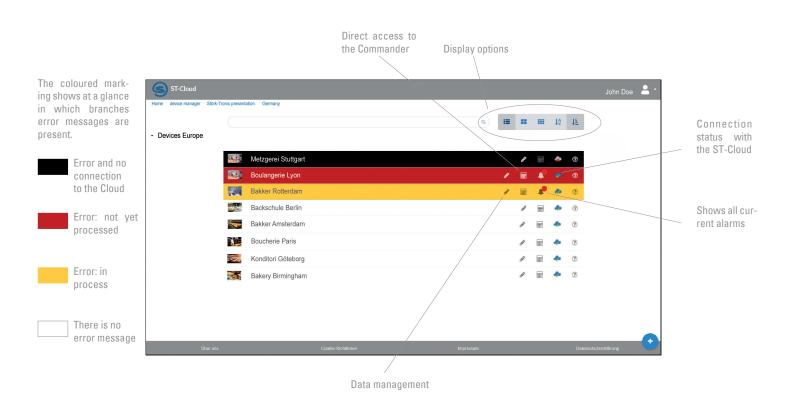
By grouping and personalising assets or devices, the ST-Cloud provides the user with a customised view of the company's structure, e.g. by region.

Overview controller status

The overview (see figure below) shows at a glance the current status of all connected Commanders and the associated controllers.

Incident manager

If, for example, a technician only wants to see the alarm messages, this is possible via the incident manager. Details on the individual alarms, such as comments from colleagues on site or the processing history, can also be accessed from here.

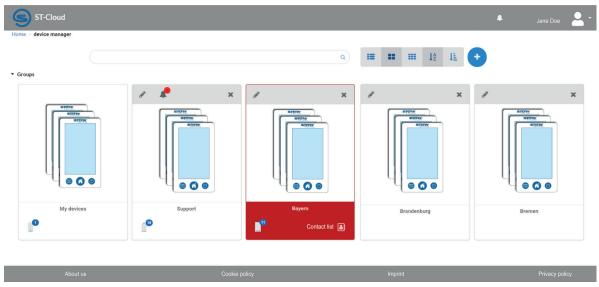


Availability and accessibility of data

The Cloud solution from Störk-Tronic offers you the mobility you need today: You can access the provided data via mobile devices such as smartphones or tablets at any time, for example while on the move or in a meeting, and receive an overview of the current status of all your branches regardless of your location. Automatic notifications of alarms or available backups are possible without any configuration effort on the end devices (e.g. via e-mail or text message).

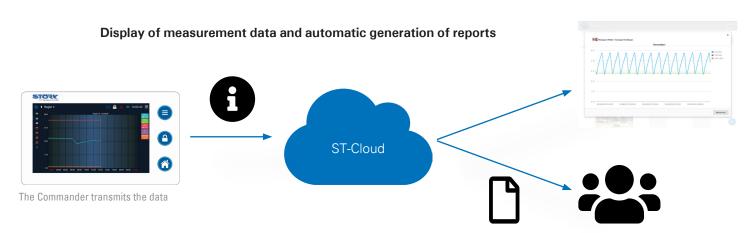
Central online administration of any number of branches

Our Cloud solution is of particular interest for companies with a large number of systems that are managed by different Commanders either because of the number of controllers connected or because of their location. By adding new clusters it is possible to integrate and provide data from any number of Commanders or even data from other systems.

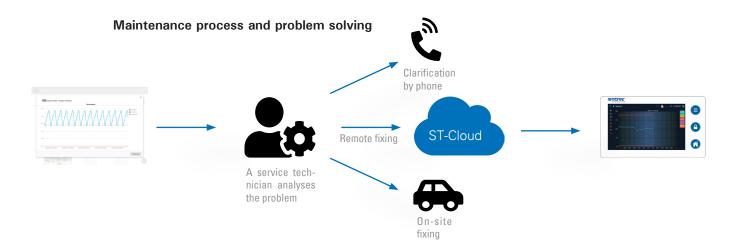


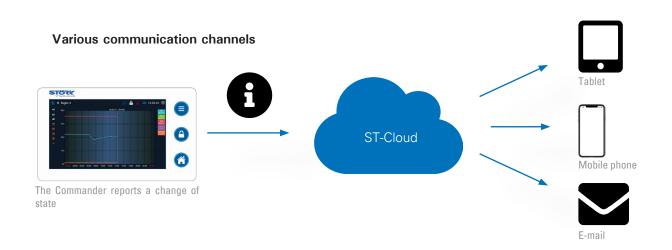
Alternative display

APPLICATION EXAMPLES

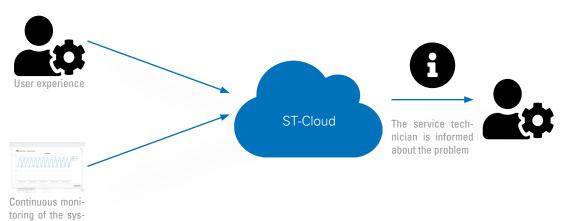


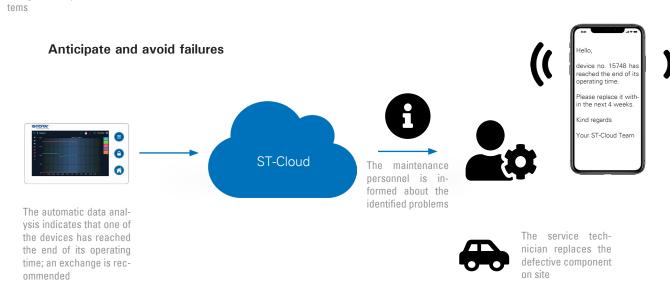
Visualisation of measurement data and preparation of a report

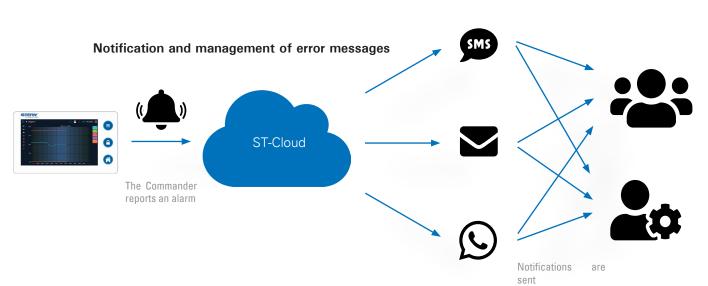




Identify problems







Financial advantages

By continuously monitoring your systems, you can, for example, analyse and compare the switch-on and switch-off processes of the end devices as well as their operating time and temperature. In this way, it is possible to identify optimisation potential in all processes and in this way to determine possible energy savings.

The automatic data analysis can be evaluated by a service technician at any location. The service technician then decides whether an on-site technician visit is necessary or whether the problem can be solved by telephone or remote access. As a result, cost-intensive technician assignments can be avoided or at least reduced.

In the event of alarms significantly faster response times are achievable and a damage limitation solution can be addressed by short term remote modifications. For example, a temperature sensor error in a refrigeration cabinet can be solved without an engineer having to drive to the location in question.

By importing data from other systems, such as sales figures or the weather forecast, into the Cloud and analysing it there, you can optimise the use of goods.

Automatic history generation allows changes to be tracked. This makes it possible to prove in a liability dispute when exactly a problem occurred and who caused it.

Organisational benefits

On an organisational level, processes can be optimised and automated by using our Cloud solution: for more efficiency in organisation and administration. For example, learning effects can be achieved through repetitive events. The continuous monitoring of all assets results in reports and graphs that visualise the recorded data and enable the service technician to draw conclusions from recurring events.

The Cloud solution from Störk-Tronic also enables synchronous monitoring: systems from different branches can be monitored simultaneously and regardless of location.

Software updates, the administration of recipes or the possibility to parametrise systems from a central office will add value for your customers and will always yield the provider a return on their investment.

In the event of alarms or maintenance recommendations, users can communicate via the ST-Cloud. In such cases, technicians can be notified in a targeted and timely manner.

Safety-relevant features

Alarm messages serve on the one hand to proactively identify problems and remedy defects or malfunctions, and on the other hand to ensure the safety of systems and all those who work with them.

Temperature-critical processes such as the oil level in a deep fryer are continuously monitored. When certain limit values are reached, an alarm is triggered immediately to prevent damage to the device or its surroundings.

Health and safety risks can be minimised by connecting to the Cloud, for example, an oven that was mistakenly not switched off after closing time would also trigger an alarm. Default values are set for triggering an alarm or another message, such as a maintenance recommendation; however, these can also be changed individually and adapted to customer requirements. Not only the controller itself, but also connected components, such as a sensor, can report critical values.

It is also possible to assign rights in the ST-Cloud based on persons and devices, e.g. to prevent data misuse or accidental deletion of data.

The perfect tool for data analysis and process optimisation

Our sales department will be happy to discuss your application and show you examples of an operative Cloud system. Please contact the relevant office for an informal demonstration or further discussions.



