Technical Note

BENKE Process Analyzers

Enhanced cyber security with BARTEC BENKE Process Analyzers thanks to Windows® 10 operating system upgradeability

TECHNICAL NOTE

Cyber security is a serious, steadily rising risk factor due to the continuously increasing digitalization and the progress of cloud-based data storage and management.

What is Cyber Security?

Cyber security is the practice of protecting computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks, also known as information technology security or electronic information security. The term applies in a variety of contexts, from business to mobile computing, and it can be divided into a few common categories. The most important parts are network security, application security, information security and end-user education.

In a more and more connected world with always-new upcoming threats, it is very important to establish measures against these threats. That is why BARTEC created a policy to have company site regulations that defines our environment and shows how we have to protect it. As a customer, you will get always a system with a fundamental level of security. This means that we guarantee a system that

is proven free of malicious data and has enabled mechanisms for protection against external threats. Nevertheless, we only guarantee this level until commission, because we cannot guarantee for the secureness within customer networks.

Based on your chosen requirements we will modify the standard analyzer and confirm the installed options in terms of cyber security. Additionally we offer repeating checks of the security skills at ordered security jobs. Our service personal will check the analyzing system comparing to the last security check. If security gaps are found, we will perform actions to close these gaps e.g. by update the anti-virus-software, if available. Thus, the analyzing system will be kept up to date and reduces the danger of an unsecure environment.

BARTEC's Advanced Cyber Security Plan

The cyber security plan is specified on our process analyzer systems. BARTEC BENKE analyzers are always constructed according to the same principle; therefore, we can define general methods and procedures to secure an analyzer properly. We guarantee a fundamental level of security at all analyzing systems.

The following list shows the measures and tests that will be performed. These definitions are **valid for a BENKE process analyzer with Windows 10 operating system**.

Performed actions prior to commission, as standard:

Anti-virus-software is installed and activated
Windows is up to date
Standard Windows firewall is active
Daily PACS backup
Full virus-scan
Real-Time Protection of system
Documentation of all created user accounts, installed programs and firewall-rules

Execution and documentation of well-established cyber security tests
Documentation and verification of all performed actions, including software versions

Optionally performed actions prior to commission:

Hardware locks for interfaces
Second user account for normal operation without admin access
Static IP-address

Optional repeating security-checks:

Check of performed and recorded actions
System updates, if possible
Perform actions to close security gaps, if necessary

Additionally, the site location BARTEC BENKE in Reinbek is part of the air carrier security program approved and supervised by the German Luftfahrt-Bundesamt, part of the European aviation security conceptions and corresponding European regulations.

By strictly adhering to the secure supply chain and the security measures required by the German Luftfahrt-Bundesamt, the goods can be sent as airfreight without additional checks.

The first step here is that the entrance to BARTEC BENKE buildings is restricted without an RFID-transponder. These transponders are only provided to authorize BARTEC BENKE personal. Any employee has to submit a police clearance certificates to access the production areas of BARTEC BENKE. Thus, these areas are secured with up to two measures. Based on this all IT-equipment, products and other equipment are only accessible by authorized personal and locked to company foreign persons.

Patch Management

The patching philosophy of our analyzer is defined in two stages. The first stage is during production until commission. Prior to commission, our service team will update the analyzer software to the latest version. After that, we will deactivate automatic updates. If the system is connected to the internet or a local Windows-Patching-Server, you will be notified by the operating system that updates are available.

The second stage is at customer site. For this environment, we have, depending on different cases, adjusted recommendations regarding the patching of the system:

Case 1 – The customer has an established patching plan for Windows operating systems

Case 2 – Connected to the customer network as client system

Case 3 – The system is never in a network environment

Cyber Security Tools and Guidelines during Maintenance or Support

Included in our "Cyber Security Plan" we will guarantee a secure and virus-free system at commission. This statement is valid for all process analyzer from BARTEC BENKE GmbH. In addition, we are offering an option called "Cyber Security Package". This package includes an examination at every service job regarding our cyber security concept. This test is based on the initial operation examination and will check the system on threats, changes and basic security based on our tight guidelines and additional agreed options.

As standard remote access software, we are using a well-established product to access the delivered analyzer at costumer site. This feature can be deactivated after initial operation. For a higher level of security, we are offering a two-way authentication remote access option. Furthermore, we can install a predefined solution if you have already a secure remote access solution.

Another optional feature for service jobs, we are offering a repeating cyber security check. This "re-verification" will include all checkpoints of the final test-procedure at initial operation. With this option, you can make sure that your system will be kept up-to-date and we will provide a test-protocol with all checked tests and versions. Finally, we will inform you about all hard- and software-changes that we will perform or that are present on the system compared to commission or the last service-job.

Windows 10 Upgradeability of the BENKE Process Analyzers

BARTEC BENKE holds original spare parts for our analyzer for a minimum of 7 years after the product was delivered and for a minimum of additional 3 years, we aim to provide equivalent parts to service our long-standing customers. With our devotion to constant product improvements and the fact that our analyzers are always constructed according to the same industrial design principle, customers can request available upgrades for their analyzers to keep them up-to-date.

An important part here is the ability to upgrade virtually any analyzer from our 4th generation to run Windows 10 with our latest PACS control software and take advantage of BARTEC's advanced cyber security. Depending on analyzer type, manufacturing date as well as installed hardware components and options, the upgrade may require a different set of hardware upgrades. As a rule of thumb, the older the analyzer, the more extensive the upgrade. Our service will coordinate together with the customer the on-site product upgrades.

Ask for your Windows 10 Upgrades

For Windows 10 upgrades of your BENKE Process Analyzers or if you have any further question, contact your local sales representative or directly our highly competent sales team in Reinbek (Germany) at:

sales-reinbek@bartec.com