

19th Jan 2022

Our Ref. 220119DM

REF: nanodac™ Recorder/Controller enhanced for Cybersecurity Robustness

Dear Customer,

Cybersecurity is no longer a secondary requirement in the industrial control's world. Eurotherm considers cybersecurity to be as important as safety or high availability.

Industrial Control Systems (ICS) based on computer technology and industrial grade networks have been in use for decades. Earlier control system architectures were developed with proprietary technology and were isolated from the outside world, thus making attacks more difficult. In many cases, physical perimeter security was deemed adequate and cybersecurity was not a primary concern.

Today many control systems use open or standardized technologies such as Ethernet TCP/IP to reduce costs and improve performance. Many systems also employ direct communications between control and business systems to improve operational efficiency and manage production assets more cost effectively. This technical evolution exposes control systems to vulnerabilities previously thought to affect only office and business computers. Control systems are now vulnerable to cyber-attacks from both inside and outside of the industrial control system network.

Consequently, many industrial control users are embarking on cybersecurity initiatives. Meanwhile, governments around the world are under pressure to address the ever increasing cybersecurity threat and there is increasing demand for governments to introduce regulation.

The device may be vulnerable to cyber attacks if connected to public networks without due care.

For further information about cybersecurity, please refer to HA032968 – Cybersecurity Good Practices Handbook.

What's new in the nanodac Recorder/Controller?

- New Instruments

All units with firmware version V8.16 or higher will force the user to enter a password for the Engineer account. Until the password is created the nanodac will be in lockdown and Ethernet communications are disabled. In addition, FTP server functionality will be disabled with no password and will remain disabled until a password is added. Once entered, the unit will start as normal. However, Engineer will be the only account enabled. Operator and Supervisor accounts will be disabled until they also have passwords created.

- Password Policy

Units fitted with firmware version V10.02 or higher have increased password policy requirements in line with the current best practices. The minimum allowable password length is now 8 characters and should contain at least 2 of the following:

- uppercase letters (A through Z)
- lowercase letters (a through z)
- numeric digits (0 through 9)
- special characters (such as !, \$, # %)

For new instruments on first power up, the user will be presented with an initial start up screen, and the user must enter a new Engineer account password that meets the above requirements. If the password requirements are not met, a message will be displayed, and the user will have to repeat the process until the requirements are met. **It is vitally important that this password is remembered** as it will serve as the Engineer account password from here on.

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For instruments with pre-existing configurations during upgrade or cloning to V10.02 or higher, the above password policy is not enforced. It is however forced on password setting, where the user will be informed if the new/updated password does not meet the minimum password requirements.

- **Upgrading an existing unit**

When the nanodac is upgraded, accounts without passwords, typically Operator, will be disabled until a password is added.

- **Cold starting**

When the nanodac is cold started all users will have their passwords reset to none, disabling them. In this scenario, the nanodac Recorder/Controller behaves as if it is a new instrument and will require a password set for the Engineer account to continue.

- **Cloning**

When restoring a clone file, accounts with no password will be disabled.

- **Default and Recovery Passwords**

In all instruments with V8.16 or higher, the ability to log in to the nanodac Recorder/Controller with a recovery password will be disabled. In the event of loss of password, please contact your local Eurotherm office.

How can I get technical support?

For Technical Support or advice, either by telephone or email, please contact your local [Eurotherm Helpdesk](#)

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