

Schneider Electric Security Notification

Modicon M218 Logic Controller

12 October 2021

Overview

Schneider Electric is aware of a vulnerability in its Modicon M218 Logic Controller product.

The [Modicon M218 Logic Controller](#) is a programmable controller providing an optimized solution to repetitive machines based on high speed counting and simple positioning features.

Failure to apply the remediation provided below may risk denial of service of the controller, when specifically crafted packets are sent to the Modicon M218 controller.

Affected Product and Versions

Modicon M218 logic controller firmware version v5.1.0.6 and prior.

Vulnerability Details

CVE ID: **CVE-2021-22800**

CVSS v3.1 Base Score 7.5 | High | CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

A *CWE-20: Improper Input Validation* vulnerability exists that could cause a Denial of Service when a crafted packet is sent to the controller over network port 1105/TCP.

Remediation

Version 5.1.0.8 of the Modicon M218 logic controller product includes a fix for this vulnerability.

- On the engineering workstation, update to EcoStruxure Machine Expert v2.0.1 or above:
<https://www.se.com/ww/en/product-range-download/2226-ecostruxure-machine-expert-%28somachine%29/?selected-node-id=14435955187#/software-firmware-tab>
- On Modicon M218 logic controller, update to latest firmware version available within EcoStruxure Machine Expert v2.0.1 or above. A reboot of the controller is needed

Customers should use appropriate patching methodologies when applying these patches to their systems. We strongly recommend the use of back-ups and evaluating the impact of these patches in a Test and Development environment or on an offline infrastructure. Contact Schneider Electric's [Customer Care Center](#) if you need assistance removing a patch.

If customers choose not to apply the remediation provided above, they should immediately apply the following mitigations to reduce the risk of exploit:

- Setup network segmentation and implement a firewall to block all unauthorized access to port 1105/TCP on the Modicon M218 controller.

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To ensure you are informed of all updates, including details on affected products and remediation plans, subscribe to Schneider Electric's security notification service here:

<https://www.se.com/en/work/support/cybersecurity/security-notifications.jsp>

General Security Recommendations

We strongly recommend the following industry cybersecurity best practices.

- Locate control and safety system networks and remote devices behind firewalls and isolate them from the business network.
- Install physical controls so no unauthorized personnel can access your industrial control and safety systems, components, peripheral equipment, and networks.
- Place all controllers in locked cabinets and never leave them in the "Program" mode.
- Never connect programming software to any network other than the network intended for that device.
- Scan all methods of mobile data exchange with the isolated network such as CDs, USB drives, etc. before use in the terminals or any node connected to these networks.
- Never allow mobile devices that have connected to any other network besides the intended network to connect to the safety or control networks without proper sanitation.
- Minimize network exposure for all control system devices and systems and ensure that they are not accessible from the Internet.
- When remote access is required, use secure methods, such as Virtual Private Networks (VPNs). Recognize that VPNs may have vulnerabilities and should be updated to the most current version available. Also, understand that VPNs are only as secure as the connected devices.

For more information refer to the Schneider Electric [Recommended Cybersecurity Best Practices](#) document.

Acknowledgements

Schneider Electric recognizes the following researchers for identifying and helping to coordinate a response to this vulnerability:

CVE	Researchers
CVE-2021-22800	Wang Yuanbo, Li Qianmu, Qi Han, Hou Jun (Henan RTSEC Technology Co., Ltd)

For More Information

This document provides an overview of the identified vulnerability or vulnerabilities and actions required to mitigate. For more details and assistance on how to protect your installation, contact

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your local Schneider Electric representative or Schneider Electric Industrial Cybersecurity Services: <https://www.se.com/ww/en/work/solutions/cybersecurity/>. These organizations will be fully aware of this situation and can support you through the process.

For further information related to cybersecurity in Schneider Electric’s products, visit the company’s cybersecurity support portal page:

<https://www.se.com/ww/en/work/support/cybersecurity/overview.jsp>

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We provide **energy and automation digital** solutions for **efficiency and sustainability**. We combine world-leading energy technologies, real-time automation, software and services into integrated solutions for Homes, Buildings, Data Centers, Infrastructure and Industries.

We are committed to unleash the infinite possibilities of an **open, global, innovative community** that is passionate with our **Meaningful Purpose, Inclusive and Empowered** values.

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Revision Control

<p>Version 1.0 12 October 2021</p>	<p>Original Release</p>
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