Schneider Electric Security Notification

PowerLogic PM55xx and PowerLogic PM8ECC

8 June 2021

Overview

Schneider Electric is aware of a vulnerability in its PowerLogic PM55xx and PowerLogic PM8ECC products.

The PowerLogic PM55xx products are power metering devices. The PowerLogic PM8ECC product is an ethernet communication module.

Failure to apply the mitigations or remediations provided below may risk elevation of privileges, which could result in loss of control of the affected device.

Affected Products and Versions

CVE	Product	Version
CVE-2021-22763 CVE-2021-22764	PM5560	Versions prior to V2.7.8
	PM5561	Versions prior to V10.7.3
	PM5562	V2.5.4 and prior
	PM5563	Versions prior to 2.7.8
CVE-2021-22763	PM8ECC	All versions

Vulnerability Details

CVE ID: **CVE-2021-22763**

CVSS v3.1 Base Score 8.1 | High | CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:H/I:H/A:H

A *CWE-640: Weak Password Recovery Mechanism for Forgotten Password* vulnerability exists that could allow an attacker administrator level access to a device.

CVE ID: **CVE-2021-22763**

CVSS v3.1 Base Score 5.3 | Medium | CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:L

A *CWE-287: Improper Authentication* vulnerability exists that could cause loss of connectivity to the device via Modbus TCP protocol when an attacker sends a specially crafted HTTP request.

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Remediation

Product	Version	Remediation
PM5560	Versions prior to V2.7.8	Version 2.8.3 of the PowerLogic PM5560, 5563, 5580 firmware includes fixes for these vulnerabilities. The version update files are available for download here: https://download.schneider-electric.com/files?p_Doc_Ref=PM5560_PM5563_PM5580 If customers choose not to apply the remediation provided above, they should immediately apply the following mitigation to reduce the risk of exploit: Customers should consider blocking HTTP access to the device at the firewall level or disable the HTTP web service to reduce the risk of exposure.
PM5563	Versions prior to V2.7.8	
PM5561	Versions prior to V10.7.3	Version 10.7.3 of the PowerLogic PM5561 firmware includes fixes for these vulnerabilities. The version update files are available for download here: https://download.schneider-electric.com/files?p_Doc_Ref=%20PM5561 If customers choose not to apply the remediation provided above, they should immediately apply the following mitigation to reduce the risk of exploit: Customers should consider blocking HTTP access to the device at the firewall level or disable the HTTP web service to reduce the risk of exposure.
PM5562	V2.5.4 and prior	Schneider Electric is establishing a remediation plan for all future versions of PowerLogic PM5562 that will include a fix for this vulnerability. We will update this document when the remediation is available. Until then, customers should immediately apply the following mitigations to reduce the risk of exploit: Customers should consider blocking HTTP access to the device at the firewall level or disable the HTTP web service to reduce the risk of exposure. 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

PM8ECC	All versions	PowerLogic PM8ECC has reached end of service and is no longer supported. Customers should immediately apply the following mitigation to reduce the risk of exploit: Customers should consider blocking HTTP access to the device at the firewall level once commissioning is complete to reduce the risk of exposure. Additionally, Customers should ensure the General security Recommendations listed below are in place.

Note: There may be newer versions of the firmware available for download, please check se.com before upgrading.

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 for the devices that it is intended for.
- 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

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CVE	Researcher
CVE-2021-22763 CVE-2021-22764	Jacob Baines (Dragos)

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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 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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Product Security Office

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