

# Schneider Electric Security Notification

## Security Notification – Modicon M221

27 September 2018

### Overview

Schneider Electric has become aware of a vulnerability in the Modicon M221 product.

### Affected Product(s)

- Modicon M221- All Versions

### Vulnerability Details

CVE ID: CVE-2018-7798

8.2 (High) CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:H/A:L

A Insufficient Verification of Data Authenticity (CWE-345) vulnerability exists which could cause a change of IPv4 configuration (IP address, mask and gateway) when remotely connected to the device.

### Remediation

The following workarounds and mitigations can be applied by customers to reduce the risk:

- Modicon M221 users should take the following measures:
  - Set up a firewall blocking all remote/external access to port 502.
  - Within Modicon M221 application, user must disable all unused protocols, especially Programming protocol, as described in section "Configuring Ethernet Network" of SoMachine Basic online help. This will prevent remote programming of the M221 PLC.

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### General Security Recommendations

We strongly recommend following industry cybersecurity best practices such as:

- Locate control and safety system networks and remote devices behind firewalls, and isolate them from the business network.
- Physical controls should be in place so that no unauthorized person would have access to the ICS and safety controllers, peripheral equipment or the ICS and safety networks.
- All controllers should reside in locked cabinets and never be left in the “Program” mode.
- All programming software should be kept in locked cabinets and should never be connected to any network other than the network for the devices that it is intended.
- All methods of mobile data exchange with the isolated network such as CDs, USB drives, etc. should be scanned before use in the terminals or any node connected to these networks.
- Laptops that have connected to any other network besides the intended network should never be allowed to connect to the safety or control networks without proper sanitation.
- Minimize network exposure for all control system devices and/or 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), recognizing that VPNs may have vulnerabilities and should be updated to the most current version available. Also recognize that VPN is only as secure as the connected devices.

### Acknowledgements

Schneider Electric would like to recognize the following researcher(s) for all their efforts related to identification and coordination of this vulnerability:

CVE	Researcher(s) Name
CVE-2018-7798	Eran Goldstein (CRITIFENCE)

### For More Information

This document is intended to help provide an overview of the identified situation and actions required to mitigate it. To obtain full details on the issues and assistance on how to protect your installation, please contact your local Schneider Electric representative. These organizations will be fully aware of the situation and can support you through the process.

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

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<http://www2.schneider-electric.com/sites/corporate/en/support/cybersecurity/cybersecurity.page>

If you require additional support, Schneider Electric Industrial Cybersecurity Services team are available to help. Please visit: <https://www.schneider-electric.com/en/work/services/field-services/industrial-automation/industrial-cybersecurity/industrial-cybersecurity.jsp>

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With global presence in over 100 countries, Schneider is the undisputable leader in Power Management – Medium Voltage, Low Voltage and Secure Power, and in Automation Systems. We provide integrated efficiency solutions, combining energy, automation and software.

In our global Ecosystem, we collaborate with the largest Partner, Integrator and Developer Community on our Open Platform to deliver real-time control and operational efficiency.

We believe that great people and partners make Schneider a great company and that our commitment to Innovation, Diversity and Sustainability ensures that Life Is On everywhere, for everyone and at every moment.

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### Revision Control:

<p><b>Version 1</b> 27 Sept 2018</p>	<p>Original Release</p>
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