

# Schneider Electric Security Notification

## SCADAPack 300E Series RTU

9 November 2021

### Overview

Schneider Electric is aware of a vulnerability in its SCADAPack 300E Series RTU products.

The [SCADAPack 300E Series RTUs](#) are a range of compact Smart RTU which control and monitor remote assets.

Failure to apply the remediation or mitigations provided below may risk a Denial of Service (DoS) attack, which could result in a forced restart to restore availability.

### Affected Products and Versions

SCADAPack 312E, 313E, 314E, 330E, 333E, 334E, 337E, 350E and 357E RTUs with firmware V8.18.1 and prior

### Vulnerability Details

CVE ID: **CVE-2021-22816**

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-754: Improper Check for Unusual or Exceptional Conditions* vulnerability exists that could cause a Denial of Service of the RTU when receiving a specially crafted request over Modbus, and the RTU is configured as a Modbus server.

### Remediation

Firmware Version 8.19.1 of the SCADAPack 300E Series RTU product includes a fix for this vulnerability and is available for download here:

<https://shop.exchange.se.com/en-US/apps/62865/scadapack-e-workbench-and-utilities>

A reboot is required when upgrading to new firmware.

To verify the remediation is in place, use SCADAPack E Configurator or the RTU command line to display the firmware version.

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.

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

- Update rules for firewall or Modbus/TCP security appliance to:
  - Setup network segmentation and implement a firewall to block all unauthorized access to port 502/TCP
  - Block invalid traffic to the RTU
  - Limit the data rate of packets delivered to the RTU

### 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 researcher for identifying and helping to coordinate a response to this vulnerability:

CVE	Researcher
CVE-2021-22816	Parul Sindhwad and Dr. Faruk Kazi (COE-CNDS Lab, VJTI, Mumbai, India)

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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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