# SSA-787941: Denial of Service Vulnerability in RUGGEDCOM ROS devices

Publication Date: 2022-11-08 Last Update: 2023-11-14 Current Version: V1.4 CVSS v3.1 Base Score: 5.3

# **SUMMARY**

RUGGEDCOM ROS-based devices are vulnerable to a denial of service attack (Slowloris). By sending partial HTTP requests nonstop, with none completed, the affected web servers will be waiting for the completion of each request, occupying all available HTTP connections. The web server recovers by itself once the attack ends.

Siemens has released updates for several affected products and recommends to update to the latest versions. Siemens is preparing further updates and recommends specific countermeasures for products where updates are not, or not yet available.

# AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
RUGGEDCOM i800: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM i800NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM i801: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM i801NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM i802: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM i802NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

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Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations
Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RMC30: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RMC30NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RMC8388 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RMC8388 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RMC8388NC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RMC8388NC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RP110: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RP110NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS400: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS400F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RS400NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS401: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS401NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416NCv2 V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416NCv2 V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416P: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416PF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416PNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RS416PNCv2 V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416PNCv2 V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416Pv2 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416Pv2 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416v2 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS416v2 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900 (32M) V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900 (32M) V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations

RUGGEDCOM RS900F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900G: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900G (32M) V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900G (32M) V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GNC(32M) V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GNC(32M) V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GP: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GPF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900GPNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RS900L: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900LNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900M-GETS-C01: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900M-GETS-XX: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900M-STND-C01: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900M-STND-XX: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900MNC-GETS-C01: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900MNC-GETS-XX: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900MNC-STND-XX: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900MNC-STND-XX-C01: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RS900NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900NC(32M) V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900NC(32M) V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS900W: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS910: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS910L: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS910LNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS910NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS910W: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS920L: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations

RUGGEDCOM RS920LNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS920W: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS930L: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS930LNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS930W: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS940G: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS940GF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS940GNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS969: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS969NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RS1600: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS1600F: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS1600FNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS1600NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS1600T: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS1600TNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000A: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000ANC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000H: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations

RUGGEDCOM RS8000HNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000T: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RS8000TNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG907R: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG908C: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG909R: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG910C: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG920P V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations

RUGGEDCOM RSG920P V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG920PNC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG920PNC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100 (32M) V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100 (32M) V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100NC(32M) V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100NC(32M) V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RSG2100P: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100PF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2100PNC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2200: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2200F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2200NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2288 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2288 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2288NC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2288NC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RSG2300 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300NC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300NC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300P V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300P V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300PF: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300PNC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2300PNC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations

RUGGEDCOM RSG2488 V4.X: All versions < V4.3.8	Update to V4.3.8 or later version https://support.industry.siemens.com/cs/ww/en/ view/109816735/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2488 V5.X: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2488F: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2488NC V4.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSG2488NC V5.X: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RSL910: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RSL910NC: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
RUGGEDCOM RST916C: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RST916P: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
RUGGEDCOM RST2228: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations

RUGGEDCOM RST2228P: All versions < V5.6.0	Update to V5.6.0 or later version https://support.industry.siemens.com/cs/ww/en/ view/109806156/ See further recommendations from section Workarounds and Mitigations
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## **WORKAROUNDS AND MITIGATIONS**

Siemens has identified the following specific workarounds and mitigations that customers can apply to reduce the risk:

- Restrict access to port 80/tcp and 443/tcp to trusted IP addresses only
- Deactivate the webserver if not required, and if deactivation is supported by the product

Product-specific remediations or mitigations can be found in the section Affected Products and Solution. Please follow the General Security Recommendations.

## **GENERAL SECURITY RECOMMENDATIONS**

As a general security measure, Siemens strongly recommends to protect network access to devices with appropriate mechanisms. In order to operate the devices in a protected IT environment, Siemens recommends to configure the environment according to Siemens' operational guidelines for Industrial Security (Download: https://www.siemens.com/cert/operational-guidelines-industrial-security), and to follow the recommendations in the product manuals. Additional information on Industrial Security by Siemens can be found at: https://www.siemens.com/industrialsecurity

## PRODUCT DESCRIPTION

RUGGEDCOM ROS-based devices, typically switches and serial-to-Ethernet devices, are used to connect devices that operate in harsh environments such as electric utility substations and traffic control cabinets.

## **VULNERABILITY CLASSIFICATION**

The vulnerability classification has been performed by using the CVSS scoring system in version 3.1 (CVSS v3.1) (https://www.first.org/cvss/). The CVSS environmental score is specific to the customer's environment and will impact the overall CVSS score. The environmental score should therefore be individually defined by the customer to accomplish final scoring.

An additional classification has been performed using the CWE classification, a community-developed list of common software security weaknesses. This serves as a common language and as a baseline for weakness identification, mitigation, and prevention efforts. A detailed list of CWE classes can be found at: <a href="https://cwe.mitre.org/">https://cwe.mitre.org/</a>.

# Vulnerability CVE-2022-39158

Affected devices improperly handle partial HTTP requests which makes them vulnerable to slowloris attacks.

This could allow a remote attacker to create a denial of service condition that persists until the attack ends.

CVSS v3.1 Base Score 5.3

CVSS Vector CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:L/E:P/RL:O/RC:C

CWE -400: Uncontrolled Resource Consumption

## **ADDITIONAL INFORMATION**

For further inquiries on security vulnerabilities in Siemens products and solutions, please contact the Siemens ProductCERT:

https://www.siemens.com/cert/advisories

# **HISTORY DATA**

V1.0 (2022-11-08): Publication Date

V1.1 (2023-03-14): Added missing affected products. Added fix to multiple products (V4.3.8)
V1.2 (2023-04-11): Added multiple missing affected products with no fix currently planned

V1.3 (2023-09-12): Added missing affected products with fix planned: RUGGEDCOM RMC8388NC

V5.X, RUGGEDCOM RS416NC v2, RUGGEDCOM RS416PNC v2, RUGGEDCOM RS900GNC(32M) V5.X, RUGGEDCOM RS900NC(32M) V5.X, RUGGEDCOM RSG2100NC(32M) V5.X, RUGGEDCOM RSG2288NC V5.X, RUGGEDCOM RSG2300NC V5.X, RUGGEDCOM RSG2300PNC V5.X, RUGGEDCOM RSG2488NC V5.X, RUGGEDCOM RSG2488NC V5.X, RUGGEDCOM

RSL910NC

V1.4 (2023-11-14): Added missing affected products: RUGGEDCOM RS416NCv2 V4.X, RUGGED-

COM RS416PNCv2 V4.x, RUGGEDCOM RS416v2 V4.X, RUGGEDCOM RS416Pv2 V4.X. Adjusted the name of RUGGEDCOM RS416NCv2 V5.X, RUGGEDCOM RS416PNCv2 V5.x, RUGGEDCOM RS416v2 V5.X, RUGGEDCOM RS416Pv2 V5.X (added reference to V5.X). Added RUGGEDCOM ROS V5.X products and respective fix (V5.6.0). Adjusted title and summary. Added "No

fix planned" for NC products

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