

## **SSA-419820: Denial-of-Service Vulnerability in TIM 1531 IRC**

Publication Date: 2021-06-08  
Last Update: 2021-06-08  
Current Version: V1.0  
CVSS v3.1 Base Score: 7.5

### **SUMMARY**

The latest update for TIM 1531 IRC fixes a vulnerability that could allow a remote attacker to cause a denial-of-service under certain circumstances.

Siemens has released an update for the TIM 1531 IRC and recommends to update to the latest version.

### **AFFECTED PRODUCTS AND SOLUTION**

<b>Affected Product and Versions</b>	<b>Remediation</b>
TIM 1531 IRC (incl. SIPLUS NET variants): All versions < V2.2	Update to V2.2 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109798331">https://support.industry.siemens.com/cs/ww/en/view/109798331</a>

### **WORKAROUNDS AND MITIGATIONS**

Siemens has not identified any additional specific mitigations or workarounds. Please follow [General Security Recommendations](#).

Product specific mitigations can be found in the section [Affected Products and Solution](#).

### **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**

TIM 1531 IRC is a communication module for SIMATIC S7-1500, S7-400, S7-300 with SINAUT ST7, DNP3 and IEC 60870-5-101/104 with three RJ45 interfaces for communication via IP-based networks (WAN / LAN) and a RS 232/RS 485 interface for communication via classic WAN networks.

SIPLUS extreme products are designed for reliable operation under extreme conditions and are based on SIMATIC, LOGO!, SITOP, SINAMICS, SIMOTION, SCALANCE or other devices. SIPLUS devices use the same firmware as the product they are based on.

### **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: <https://cwe.mitre.org/>.

Vulnerability CVE-2018-0732

During key agreement in a TLS handshake using a DH(E) based ciphersuite a malicious server can send a very large prime value to the client. This will cause the client to spend an unreasonably long period of time generating a key for this prime resulting in a hang until the client has finished. This could be exploited in a Denial Of Service attack.

CVSS v3.1 Base Score	7.5
CVSS Vector	<a href="#">CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H/E:P/RL:O/RC:C</a>
CWE	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 (2021-06-08): Publication Date

### **TERMS OF USE**

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