SICK
Sensor Intelligence.

SICK PSIRT
Security Advisory

Vulnerability in SICK Lector8xx and SICK InspectorP8xx

Document ID: SCA-2025-0002
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CVE Identifiers: CVE-2025-0592, CVE-2025-0593
Version: 1

Summary

SICK has found two vulnerabilities that affect the SICK Lector8xx and SICK InspectorP8xx. The vulnerabilities may allow a remote low priviledged attacker to run arbitrary shell commands by manipulating the firmware file or executing low-level functions.
SICK is currently not aware of any public exploits.

List of Products

Product	Affected by
SICK InspectorP8xx firmware versions <3.11.1	CVE-2025-0592 Status: Known Affected Remediation: Vendor fix
	CVE-2025-0593 Status: Known Affected Remediation: Vendor fix
SICK Lector8xx firmware versions <2.4.0	CVE-2025-0592 Status: Known Affected Remediation: Vendor fix
	CVE-2025-0593 Status: Known Affected Remediation: Vendor fix

Vulnerability Overview

CVE-2025-0592 Improper Enforcement of Message Integrity During Transmission in a Communication Channel

Summary: The vulnerability may allow a remote low priviledged attacker to run arbitrary shell commands by manipulating the firmware file and uploading it to the device.

CVE-2025-0592 has been assigned to this vulnerability.
CVSSv3.1 base score: 8.8
CVSSv3.1 vector string: CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H
CWE identifier: CWE-924 (Improper Enforcement of Message Integrity During Transmission in a Communication Channel)

CVE-2025-0593 Improper Neutralization of Special Elements used in a Command ('Command Injection')

Summary: The vulnerability may allow a remote low priviledged attacker to run arbitrary shell commands by using lower-level functions to interact with the device.

CVE-2025-0593 has been assigned to this vulnerability.
CVSSv3.1 base score: 8.8
CVSSv3.1 vector string: CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H
CWE identifier: CWE-77 (Improper Neutralization of Special Elements used in a Command ('Command Injection'))

Remediations

Vendor Fix for CVE-2025-0592

Details: Users are strongly recommended to upgrade to the latest release of the Lector8xx (>=2.4.0) and the InspectorP8xx (>=3.11.1) respectively that includes a patch for the vulnerability. It is also recommended to set a secure password, please refer to the respective operating instructions, linked in the reference section.

Valid for:

- SICK InspectorP8xx firmware versions <3.11.1
- SICK Lector8xx firmware versions <2.4.0

Vendor Fix for CVE-2025-0593

<u>Details</u>: Users are strongly recommended to upgrade to the latest release of the Lector8xx ($>$=2.4.0) and the InspectorP8xx ($>$=3.11.1) respectively that includes a patch for the vulnerability. It is also recommended to set a secure password, please refer to the respective operating instructions, linked in the reference section.

<u>Valid for</u>:

- SICK InspectorP8xx firmware versions $<$3.11.1
- SICK Lector8xx firmware versions $<$2.4.0

General Security Practices

General Security Measures

As general security measures, SICK recommends to minimize network exposure of the devices, restrict network access and follow recommended security practices in order to run the devices in a protected IT environment.

Vulnerability Classification

SICK performs vulnerability classification by using the CVSS scoring system (*CVSS v3.1*). The environmental score is dependent on the customer's environment and can affect the overall CVSS score. SICK recommends that customers individually evaluate the environmental score to achieve final scoring.

Resources

SICK PSIRT Security Advisories:
https://sick.com/psirt

SICK Operating Guidelines:
https://cdn.sick.com/media/docs/1/11/411/Special_information_CYBERSECURITY_BY_SICK_en_IM008 4411.PDF

ICS-CERT recommended practices on Industrial Security:
https://www.cisa.gov/resources-tools/resources/ics-recommended-practices

CVSS v3.1 Calculator:
https://www.first.org/cvss/calculator/3.1

Lector85x operating instructions:
https://cdn.sick.com/media/docs/8/48/648/operating_instructions_lector85x_can_i_o_image_based_code_reader_en_im0101648.pdf

Inspector83x operating instructions:
https://cdn1.npcdn.net/userfiles/19423/attachment/5023455/20240604_86cc78525f735019023e2f3f65d5c9b9/operating_instructions_inspector83x_2d_machine_vision_en_im0108639.pdf

History

Version	Release Date	Comment
1	2025-02-14	Initial version