

FRAUNHOFER INSTITUTE FOR SECURE INFORMATION TECHNOLOGY

CERTIFICATE

The Security Test Lab of the Fraunhofer Institute for Secure Information Technology (SIT) certifies that the

Accu-Chek® Solo micropump system

consisting of Accu-Chek® Solo micropump and Aviva/Performa/Guide diabetes manager by the

Roche Diabetes Care GmbH, Sandhofer Str. 116, 68305 Mannheim, Germany

has passed the security analysis.

The Security Test Lab of the Fraunhofer SIT performed an advanced, applied gray box test and a conceptual review of the complete system and its exposed interfaces. Fraunhofer SIT testifies the compliance to the security requirements of the intended use-case.

Security analysis short summary:

Provided that the user follows the instructions given in the manual, the key exchange during wireless device pairing is sufficiently secure. Random numbers and keys are generated with cryptographic PRNGs and used properly. The confidentiality and authenticity of subsequent wireless communication is ensured through the use of AES-128 in CCM mode.

The wireless Bluetooth LE interfaces, the USB interface and the service interface provide adequate access control and the protocol implementations were found to be according to specification and robust against fuzzing tests and tested attack vectors.

In accordance with the manual, the user is advised to prevent extended physical access to both devices by untrust-worthy persons.

Privacy aspects were not considered for this certificate.

The certificate is valid for the Accu-Chek® Solo micropump in combination with an Accu-Chek® Aviva/Performa/Guide Solo diabetes manager. It is not valid for other combinations or configurations.

Certificate number

24-15677

Release date Mar 2024

Validity
Mar 2026

Tested versions:

- Accu-Chek® Solo micropump PBA 2.2.0 and PBA 3.2.0
- Accu-Chek® Aviva Solo diabetes manager Accu-Chek® Performa Solo diabetes manager Accu-Chek® Guide Solo diabetes manager DM 4.3.0 and DM 4.4.0

Prof. Dr. Michael Waidner | Institutsleitung