

Subject: Addressing meltdown & spectre vulnerability of Intel CPU

Date: November 21, 2024

Dear Valued Customer,

We are writing to confirm the security of Hyosung ATMs against the “Meltdown and Spectre” vulnerabilities affecting modern processors and operating systems.

Key Security Assurances:

- These vulnerabilities are common to computer systems, including servers and PCs.
- Hyosung follows industry-standard security practices by storing sensitive transaction data in isolated EPP (Encrypting PIN Pad) hardware.
- Microsoft already released security updates in January 2018 to mitigate these “Meltdown and Spectre” vulnerabilities. More details are available at:

<https://www.ncsc.gov.uk/guidance/meltdown-and-spectre-guidance>

<https://portal.msrc.microsoft.com/en-US/security-guidance/advisory/ADV180002>

Hyosung has a well-established “Hotfix Release” practice in which we regularly apply Microsoft security updates to its ATMs. The Hotfix Release information and KB numbers, mitigating “Meltdown and Spectre” are as follows:

- 1) **2016 OS:**
Initial hotfix KB4088787 applied on 2018-01-03
Subsequent hotfix KB5043051 applied on 2024-09-10
- 2) **2019 OS:**
Initial hotfix KB4467708 applied on 2018-01-03
Subsequent hotfix KB5043050 applied on 2024-09-10

Safeguarding customers’ transaction data is our top priority. Therefore, as we always do, our dedicated security team will continuously monitor our systems for potential threats and implement proactive measures to mitigate risks. Thank you for your continued trust and confidence in our services.

Sincerely,

Hoon Lee
Vice President, Head of R&D Center