# Rain Technology launches innovative POS switchable privacy solution at NRF Expo



Rain Technology, a leading developer of advanced directional display technologies, has announced the launch of its innovative POS Switchable Privacy solution at the National Retail Federation (NRF) Expo. This product is poised to address growing concerns surrounding visual hacking, particularly at point of sale (POS) terminals, which have experienced significant growth and are projected to expand from an estimated market size of $100.24 billion to $151.97 billion by 2029, as reported by Mordor Intelligence.

As the frequency of transactions increases at POS terminals, alongside the rising use of handheld and customer-facing systems, the sensitivity to visual hacking becomes a pressing issue. In light of this, Rain Technology has developed a thin, proprietary liquid crystal layer integrated into its display panels, significantly enhancing both visual privacy and optical performance. This layer can be automated to switch to privacy mode, shielding sensitive information during critical transaction phases, such as checkout, payment, and personal identification number (PIN) entry. Robert Ramsey, Ph.D., CEO of Rain Technology, emphasised the importance of this innovation, stating, “We’ve all been there, checking out at the register and covertly protecting our screen view.” He highlighted the collaboration between their scientists, manufacturers, and the supply chain to ensure that displays remain visible exclusively to the intended viewer, while others see only marketing messages.

The applications for this solution extend beyond retail, reaching into sectors where data privacy is paramount, including healthcare, in compliance with HIPAA regulations. Along with the Switchable Privacy solution, Rain Technology also introduced a POS Display Screen Branding innovation designed for marketers. This embedded technology allows promotional content to be directed at peripheral viewers while ensuring the primary user enjoys a private session.

Rain Technology plans to make its Switchable Privacy solutions widely available through Datecs, a prominent manufacturer and seller of POS solutions. The Datecs system electronically adjusts the POS display from a wide-angle view for promotional purposes to a narrow viewing angle during transactions, thereby enhancing consumer confidence in data protection. Furthermore, the company aims to lower the cost of these solutions to facilitate broader adoption within various retail environments. Ramsey noted, “Due to significant price pressure for our partners in POS manufacturing, we have worked over the past months to create low-cost Switchable Privacy solutions.”

The POS Switchable Privacy display solution has garnered recognition within the industry, having been shortlisted for the 2024 RTIH Innovation Awards in the Payments Innovation category and winning the "SalesTech Innovation Award" in the 7th annual MarTech Breakthrough Awards programme.

As the business landscape continues to evolve, innovations like Rain Technology’s Switchable Privacy solution underscore the integration of advanced technologies in enhancing customer information security, thereby supporting safer and more efficient transaction processes across diverse public settings such as retail stores, restaurants, hotels, and transit hubs.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Corroborates the launch of POS Switchable Privacy at the National Retail Federation (NRF) Expo and the market size projections.
2. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Details the development of the thin, proprietary liquid crystal layer and its automation to switch to privacy mode during transactions.
3. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Explains the collaboration between Rain Technology's scientists, manufacturers, and the supply chain to ensure exclusive visibility to the intended viewer.
4. <https://itsupplychain.com/rain-technology-embeds-visual-security-delivers-display-innovation-from-smartphone-to-ar-vr/> - Discusses the broader applications of Switchable Privacy beyond retail, including healthcare and compliance with HIPAA regulations.
5. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Describes the POS Display Screen Branding innovation and its ability to direct promotional content to peripheral viewers.
6. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Details the partnership with Datecs for the widespread availability of Switchable Privacy solutions and the electronic adjustment of the POS display.
7. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Mentions the efforts to lower the cost of Switchable Privacy solutions to facilitate broader adoption in retail environments.
8. <https://www.businesswire.com/news/home/20250107562360/en/Rain-Technology-Introduces-POS-Switchable-Privacy-at-NRF-%E2%80%9925-to-Protect-Customers-From-Visual-Hackers> - Corroborates the industry recognition of the POS Switchable Privacy display solution, including awards and nominations.
9. <https://itsupplychain.com/rain-technology-embeds-visual-security-delivers-display-innovation-from-smartphone-to-ar-vr/> - Highlights the integration of advanced technologies in enhancing customer information security across various public settings.
10. <https://www.digitaltransactions.net/rain-technology-launches-an-atm-privacy-solution/> - Provides additional context on the application of Switchable Privacy technology in other sectors, such as ATMs, and its benefits in reducing visual hacking risks.
11. <https://www.businesswire.com/news/home/20241001810805/en/Rain-Technology-Debuts-OLED-Switchable-Privacy-in-Advance-of-Mobile-World-Congress> - Details the broader applicability of Switchable Privacy technology across different types of displays, including OLED, and its significance in enhancing visual security.
12. <https://enterpriseviewpoint.com/tinkering-with-the-critical-pos-technology-to-conceive-a-more-secure-experience/> - Please view link - unable to able to access data