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Reliable by design: The testing behind Unitron's Smile platform

Unitron
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At Unitron, we know that hearing aids are more than just devices—they're lifelines to the moments that matter most. Whether it's a conversation with a loved one, laughter in a crowded room, or the subtle nuances of music, reliability is key to ensuring users can fully engage in their world without worry. That's why Smile is designed for long-term reliability!

Introducing Smile: A platform built for dependability

Smile is Unitron's newest hearing aid platform, designed to enhance the hearing journey with brilliant sound performance, universal connectivity, and all-day reliability. Powered by the new ERA™ chip, Smile offers our best-ever sound performance, adapting seamlessly to different listening environments. Whether users are in a bustling café or enjoying an important chat at home, Smile helps ensures they can hear—and feel—those key moments.

Reliability is at the heart of Smile's design. Moxi™ S-R hearing aids, on the Smile platform, feature a new water-resistant housing for enhanced durability, while the ChargerGo provides on-the-move charging. Behind the scenes, a rigorous reliability program ensures Smile hearing aids are tested to withstand real-life conditions.

Engineering excellence for long-term performance

Reliability isn't just something we check off a list—it's an ongoing commitment. "We design hearing aids with the understanding that people need them to work, day in and day out," says Dalan Gross, Reliability leader at Unitron.

Gross and the team take a proactive approach, identifying potential risks early and implementing extensive testing protocols. "We collaborate across R&D, Product Management, Marketing, and Quality to continuously refine our devices," he explains. "We're not just building hearing aids—we're making sure they hold up in the real world."

Designed to withstand everyday challenges

Smile hearing aids are developed with advanced durability enhancements to help ensure long-lasting performance:

- **Advanced parylene coating** – This ultra-thin protective layer enhances environmental resistance, helping maintain performance in various conditions.
- **Sealed battery compartment** – Fully encapsulating this area minimizes exposure to moisture and debris.
- **Dual-sided microphone inlet** – Designed for added protection and durability to help support reliable performance.
- **High-performance charging system** – Built for stability, this mechanism is designed to support long-term reliable charging.



"Reliability isn't just about avoiding failures," Gross notes. "It's about giving people the confidence that their hearing aids will work when they need them most."

Putting Smile to the test

Our reliability process involves thousands of hours of rigorous testing.

"We don't just assume reliability—we prove it," Gross explains. "We test these devices in real-world conditions, pushing them to the limits to ensure they can handle everyday wear and tear."

Some of the key assessments include:

- **Volume control cycling test** – Simulates long-term use by pressing the push button thousands of times.
- **Charger insertion test** – Ensures smooth and stable charging through repeated insertion cycles.
- **Drop tests** – Devices and chargers undergo impact testing as part of the reliability assessment.
- **Receiver pull-out test** – Conducted for multiple cycles to verify stability.
- **IP68 water & dust resistance testing** – Evaluates resilience against common environmental factors.
- **Extended cyclic corrosion test** – Devices are exposed to artificial sweat and humidity in a controlled environment to assess performance.



One of the most intensive tests is the Comprehensive Charging System Test, which evaluates 50 chargers and 50 hearing aids over a five-day period. "We make sure every device performs as expected, every single time it's inserted," Gross explains.

Why reliability matters

For hearing care professionals (HCPs), reliable hearing aids can reduce service needs over time, allowing them to focus on providing the best care for their clients.

For users, a dependable hearing aid means less downtime and more confidence in their device. "If you wear hearing aids every day, you shouldn't have to think about whether they'll work—you should just be able to trust that they will," says Gross.

For Unitron, reliability is a continuous journey. "We're always working to improve—not just in future products, but in optimizing the ones we already have on the market," Gross explains. "The Smile platform isn't just about great sound; it's about making sure that sound is there when you need it."

At Unitron, we believe that the hearing journey should be easy. With Smile's advanced performance, universal connectivity, and proven durability, users can focus on what matters most: living life, fully engaged, with confidence in every moment.

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