

Driving Innovation in RF Microneedling with Excelsys Xgen 4-Slot Series

INDUSTRY**Medical****SOLUTION****Excelsys Xgen 4-slot Series****APPLICATION****Aesthetic Lasers****CHALLENGE**

A leading manufacturer of advanced medical aesthetic devices specializes in laser systems, IPL technology, and RF microneedling solutions. Their products are designed to deliver cutting-edge beauty treatments for both face and body, ensuring superior results in skin rejuvenation and aesthetic care.

To stay ahead in a highly competitive market, the customer aimed to upgrade their existing instrument with the latest medical technology. The goal was to enhance performance and integrate additional applicators to support a broader range of treatments. This required a solution that could seamlessly accommodate new functionalities while maintaining reliability and safety standards.

SOLUTION

The RF microneedling for skin rejuvenation treatment uses radiofrequency energy delivered through fine needles to stimulate collagen production and improve skin texture, firmness, and reduce wrinkles.

To meet the customers' requirements, the Advanced Energy (AE) engineering team recommended the Excelsys Xgen 4-slot series, a highly configurable power supply designed to handle complex system requirements. This solution was ideal for managing all system loads within a single, streamlined unit, ensuring efficiency and reliability.



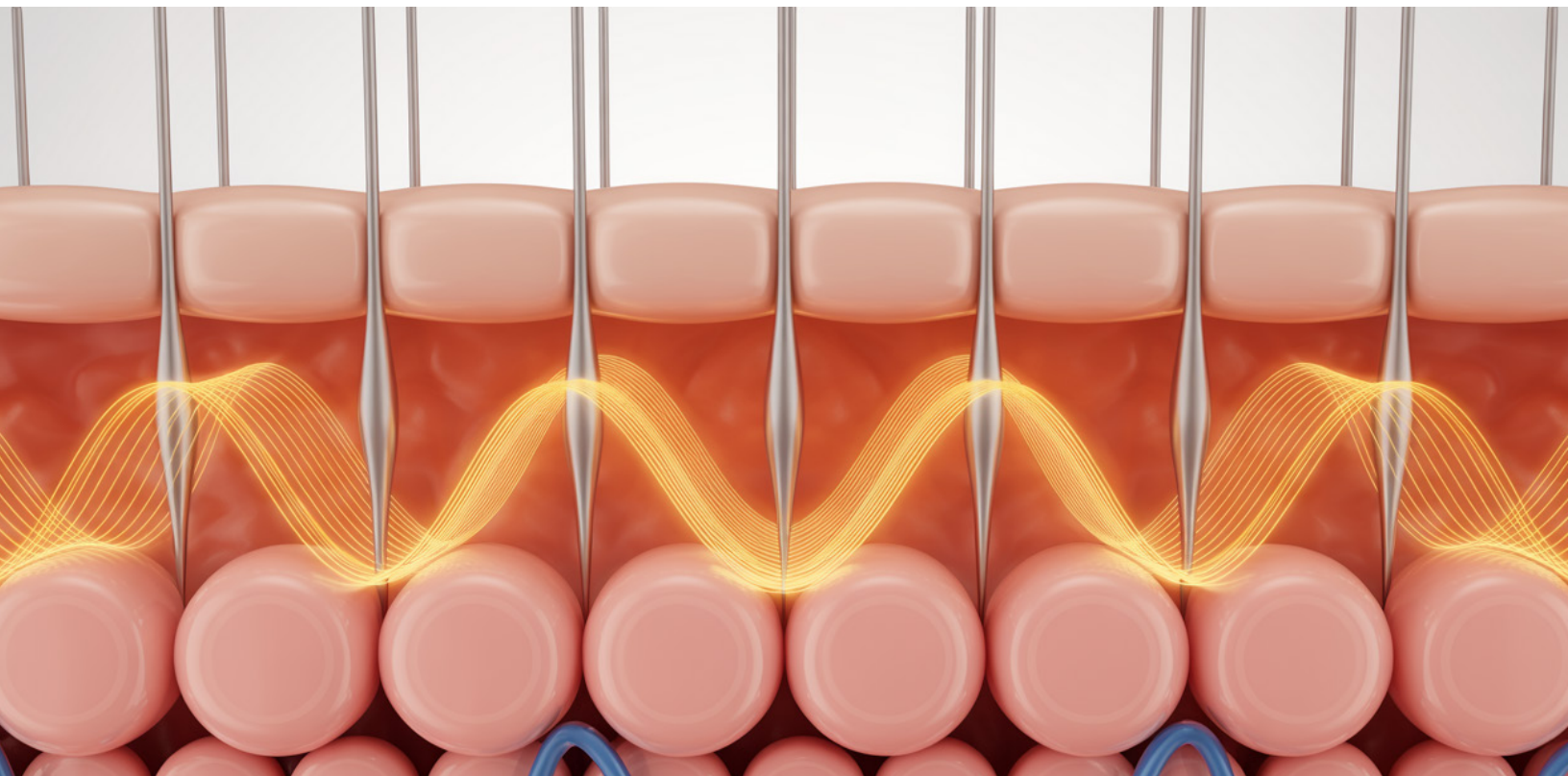
The approach leveraged proven success from previous applications for customers with similar systems. By customizing the XMC module which involved adjusting the Under Voltage Lockout (UVLO) detection settings and incorporating an AC voltage dip modification, the system achieved optimal performance while maintaining 2 MOPP safety compliance for medical standards.

This tailored configuration allowed the upgraded instrument to support multiple applicators and advanced RF microneedling technology, delivering consistent power and stability for high-precision aesthetic treatments.

RESULTS AND CONCLUSION

The upgraded system delivered exactly what the customer needed: a single, configurable power solution capable of managing all system loads with precision and reliability. By leveraging the proven performance of the Excelsys Xgen 4-slot XMC module and tailoring it to meet specific voltage requirements, the solution ensured seamless integration with the new applicators and advanced RF microneedling technology.

This success was built on prior experience with similar applications and strong technical expertise by the AE engineering team, as well as close collaboration with the customer's engineering team. This resulted in a robust, future-ready platform that supports cutting-edge aesthetic treatments while maintaining the highest medical standards of safety and performance.



For international contact information,
visit advancedenergy.com.

powersales@aei.com
productsupport.ep@aei.com
+1 888 412 7832

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