QUADESSY Classys

QUADESSY, which integrates noninvasive bipolar RF and microneedling RF into a single platform, demonstrates a new level of clinical efficiency across a broad range of indications, including skin rejuvenation, skin tightening, and pigmentation. Its key strength lies in the integrated operation of three core technologies – Hybrid Modalities, Double depth MNRF, Dual phase Heating Approach – which together provide consistent treatment performance and safety within a relatively short procedure time.

Through its Hybrid Modalities configuration, combining MNRF and bipolar RF, QUADESSY delivers both precise dermal coagulation via microneedling RF and superficial bulk heating via bipolar RF. Bipolar RF first preheats the epidermis and upper dermis to enhance tissue responsiveness, after which MNRF precisely delivers energy to the target layer to promote a more pronounced rejuvenation effect. In addition to preset sequences, operators can freely adjust the order in which the two energy modalities are delivered, allowing customized protocols tailored to specific treatment objectives.

QUADESSY's Double depth MNRF technology incorporates a proprietary needle design capable of delivering energy simultaneously at two depths with a single shot. By reducing the need for repeated shots while creating optimized coagulation zones at two tissue layers, this technology maximizes the dual benefits of transdermal drug delivery and dermal remodeling.

The Dual phase Heating approach further improves procedural safety and reduces downtime. The preheating phase enhances microcirculation and tissue receptivity, whereas the post heating phase helps disperse residual heat, alleviate erythema, and minimize needle marks.



QUADESSY

This dual thermal control strategy promotes regenerative responses while substantially reducing the risk of adverse effects.
QUADESSY also differentiates itself through its energy control mechanism. While some RF devices may deliver inconsistent energy as voltage fluctuates in response to changes in skin impedance, QUADESSY uses a proprietary algorithm to simultaneously control voltage and current, maintaining constant power output (P = VI). This enables consistent energy delivery across areas with varying skin resistance. Such reproducibility is particularly valuable for indications requiring uniform low energy delivery, such as erythema and melasma.
Rather than delivering energy as a single pulse, QUADESSY uses multiple sub-pulses to fractionate energy delivery. This creates a uniform coagulation zone without overheating and maintains dermal temperature within the 42-45℃ range to induce reversible thermal reactions. This process is optimized for precise microstructural remodeling, including type III collagen reorganization, vascular stabilization, and reduction of superficial microvessels. In terms of drug delivery, the combination of double depth needles and bulk heating from noninvasive RF may further enhance topical application and absorption efficiency, while creating synergistic regenerative effects.
In summary, QUADESSY is a next generation RF platform that offers simultaneous targeting of superficial and deep tissue layers through its hybrid RF configuration; uniform energy delivery based on constant power control; reduced downtime through dual phase heating; enhanced drug delivery through double depth microneedling; and high treatment efficiency within a short procedure time. With these capabilities, QUADESSY has strong potential to become a new standard platform for a wide range of clinical applications, including pigmentation, erythema, skin rejuvenation, and drug delivery.