Preserving all the features of the 30 W SmartXide DOT, but with 60% more power, the new SmartXide DOT HP laser from DEKA Medical, Inc. (San Francisco, Calif.), allows practitioners to target deeper tissue with a single pulse. It also avoids the need for pulse stacking and spares patients from uncontrolled lateral thermal damage.

According to W. Gregory Chernoff, M.D., F.R.C.S.(C), a facial plastic and reconstructive surgeon with practices in Indianapolis, Ind.; Santa Rosa, Calif. and Newport Beach, Calif., SmartXide DOT HP offers unsurpassed versatility. “I can now use this fractionated system to achieve a light peel or go as deep as I need to go. This is the first device that lets me tune the wattage, thermal dwell time and spacing of the penetration points.”

Better results, less downtime and less patient discomfort can be expected with the new DOT HP – which stands for Higher Power. The DOT HP creates quick and clean ablation channels at up to 250 W peak power, and features an extremely short pulse length at under 150 µs to avoid char and post-inflammatory hyperpigmentation.

Dr. Chernoff, who has been using the DOT HP for six months, provides Summer Peels for male and female patients of all skin types. “I can decrease the energy to 5 to 7 W instead of 25 to 50 W,” he explained. He also cuts the dwell time from between 800 to 1,000 µs down to 200 µs, and instead of keeping the spacing at 2,000 microns, he decreases it to 800 to 1,000 microns. “I don’t have to use a topical anesthetic. What’s more, within hours of treatment, patients with Fitzpatrick skin types I to III aren’t even erythematous and they show improvement within two weeks,” Dr. Chernoff continued. “A Summer Peel is like air brushing in photography.” In Dr. Chernoff’s experience the best candidates are fair skinned women or men who don’t want any downtime.

Dr. Chernoff uses the DOT HP to treat: women with pigment variation secondary to hormonal changes and sun exposure; Mediterranean and Asian patients with pigmented inflammation; mild acne scars, spots, blotchiness and discoloration; and atrophic scars, stretch marks, loss of elasticity of the lower abdomen and lack of skin tone. “It is critical to listen to patients and undersell what you can accomplish,” he said. “They are then wowed by the results.”

Dr. Chernoff also feels that the SmartXide DOT HP’s superpulse technology is a step up from continuous wave CO₂ lasers. “You can control depth of penetration better. If I look at type I to type IV patients, proportionate to age and area, thickness of epidermis and dermis – including forehead, chin, nose and cheek – I am changing depth of penetration and thermal dwell time, as needed. This allows me to maximize treatment effects and clinical outcomes,” he said. Higher power is best for scars, as well as thicker areas of the epidermis and dermis, while lower energy is indicated for stretch marks or type I skin.