

Laser Hair Removal Handles

Laser wavelengths 755nm/810nm/1064nm are suitable to all types of skins. Spot sizes of the laser hair removal handles are optional and available at 11x11mm, 10x17mm, 15x25mm, 20x30mm, 10x40mm etc. Other spot sizes available upon request.



1. STO-Sunny 755nm Laser Hair Removal Handles

STO-Sunny series treatment handles use the most popular 755nm diode lasers which replace the solid state alexandrite lasers and have a more comfortable treatment. It is effective for melanin to absorb 755nm diode laser beam. This characteristic is good for villi hair removal when people use 755nm diode laser treatment handle. And the treatment time is shorter.



- Especially for small villi hair removal
- Perfect replacement of Alexandrite laser
- Low price and no consumptive material
- Customized products available
- Can be mixed with 810nm and 1060nm in one handle

STO-Sunny series treatment handles use Germany-made 400W-1200W micro channel diode lasers. The spot sizes are 11mmx11mm and 10mmx17mm optional. The skin contactor uses 2pcs TEC

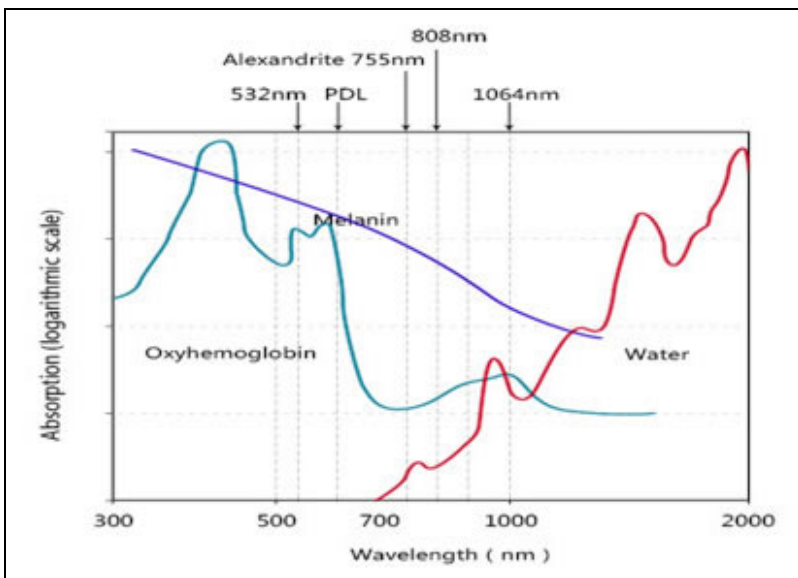
conduction sapphire cooling systems. The performance is stable, the cooling system is strong and the treatment is safe and comfortable. Besides the standard mode, we can serve OEM services for multiple laser powers.

Our Core Technologies

- 755nm diode laser light is professional for small tiny hair. It can make hair removal fast and complete.
- Germany micro channel cooled diode stacks, Seiko creation, ingenuity quality.
- The optional beam sizes are 11mm×11mm and 10mm×17mm.
- Our new mounting technologies with hard solder special for medical beauty application with greatly improved diode lifetime.
- 2 pcs 55W Peltier coolers, matched to cooling spot which is made of sapphire packed with gold coated cooper, enough cooling to make sure comfortable feeling.
- Precision calculation on handles inside light refraction angle to make sure high laser power output.
- Lightweight design, easy hold and handle weight is only 300g for easy operation.

Application Principle

Compared with 810nm diode laser, black hair mother cell can have a better effect to absorb 755nm light. It can remove the hair in the short time. Especially it has a great effect on small villi hair removal such as labial wool.



Handle Mode	STO-Sunny-600-S	STO-Sunny-600-L
Laser energy range	0-120J	0-120J
frequency	1-10Hz	1-10Hz
Laser stack	Micro channel	Micro channel
Wavelength	755nm	755nm
Spot size	11mm×11mm	17mm×10mm

Treatment Results



2. STO-Golden Series 810nm Laser Hair Removal Handles

STO-Golden series diode laser treatment handles use 400W-1200W micro channel diode lasers from Germany, and the spot sizes are 17mmx10mm and 11mmx11mm optional. The sapphire in skin contactor is covered by pure cooper, which is cooled by 2pcs TEC cooling chips. Treatment will be comfortable and safe. Besides standard models, we can offer many kinds customized OEM products according to your specific needs.



- Diode laser is originally from Germany
- Life time reaches 40 million shots

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- Spot sizes are 17mm×10mm & 11mm×11mm optional
- Treatment head is made of pure copper with gold coating
- Customized and other laser wavelengths mixed available

Application Principle

STO-Golden series diode laser handles use diode laser with wavelength 810nm. The chromophores include melanin, hemoglobin and water that can absorb such near infrared light. 810nm laser light is absorbed by target of these three color groups and produce thermal effects, resulting in the following therapeutic effects:

- Diode laser action in dermal tissue collagen cells and connective tissue, induce the synthesis of new collagen cells and extracellular matrix, without interfering with or damaging the epidermis, improve wrinkles, scars and pits elastic tissue degeneration and other issues.
- At the same time promoting the dermal collagen and connective tissue structural changes, the diode laser also plays the role of melanin in dermal tissue and blood vessels to make them thermal decomposition, also dermal and epidermal pigmentation reduction, reducing telangiectasia to improve overall skin texture more smooth and gloss. Concerned with improving the problems are: photo-aging, age spots, redness, skin bleak, filled with shape-related vascular and pigmented erythema and rosacea and other issues.
- Permanent hair removal. Moderate laser beam penetrates the epidermis and selectively makes action on the hair follicle cells to stop growing, so as to achieve the effect of the permanent eliminate unwanted hair.

Our Core Technologies

We major in diode laser mounting and diode laser hair removal handle manufacture over 16 years. We provide over 300pcs handles per month for our world-wide customers. We have rich experience of diode laser hair removal handle fabrication and powerful customized ability.

- Germany micro channel cooled diode stack, Seiko creation, ingenuity quality.
- Our new mounting technology with hard solder special for medical beauty research with greatly improved diode lifetime.
- 2pcs 55W Peltier cooler, matched to cooling spot which is made of sapphire packed with gold coated cooper, enough cooling to make sure comfortable feeling.
- Precision calculation on handle inside light refraction angle makes sure high laser power output.
- Lightweight design, easy hold and handle weight is only 300g with easy operation.

Handle mode	STO-Golden-600-S	STO-Golden-600-L	STO-Golden-400-S	STO-Golden-400-L
Laser power	600W	600W	400W	400W
Laser stack	Micro channel	Micro channel	Macro channel	Macro channel
Spot size	11mm×11mm	10mm×17mm	11mm×11mm	10mm×17mm
Wavelength	810nm (755nm and 1060nm available)			
Skin contact materials	Gold-plated copper and Sapphire			
Skin contact cooling	2 pieces (55W per piece)			
Cooling water flow rate	>4L/min 2L±10%			
Cooling water	Deionized water or distilled water			

Remark: In addition to the standard codes, the number of laser chip can be customized. The number of laser chip is 3-30pieces optional.



3. STO-Ocean 1064nm Laser Hair Removal Handles

STO-Ocean series treatment handles with 1064nm diode lasers are professional for dark skin and even sunburned skin hair removal. They perfectly replace YAG solid state lasers in hair removal application. With 2pcs TEC cooling for skin surface, 11mm×11mm and 10mm×17mm are available and the hair removal treatment is very effective and safe. STO-Ocean series 1064nm diode laser treatment handles are excellent with full functions for dark skin safety hair removal, skin rejuvenation, wrinkle removal, skin whitening and smooth.



- For dark skin even sun burnt skin hair
- Diode life time is over 40,000,000 shots
- Low cost and no consumptive material
- Customized service available

Application Principle

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1064nm laser beam inserts hair follicle of dermis and makes the hair stop growing and removes hair permanently. On the other hand, it inserts the collagen cells and connective tissue of dermis and makes it produce new collagenocyte and extracellular matrix.

Our Core Technologies

- 1064nm diode laser is professional for dark skin. It can solve the problem completely that the dark skin can be easily burnt.
- 1064nm diode laser is multifunctional for hair removal, skin rejuvenation, wrinkle removal and make the skin smooth and bright.
- Germany micro channel cooled diode stack, Seiko creation, ingenuity quality.
- The optional sizes are 11mm×11mm and 10mm×17mm.
- Our new mounting technology with hard solder special for medical beauty research with greatly improved diode lifetime.
- 2pcs 55W Peltier coolers, matched to cooling spot which is made of sapphire packed with gold coated cooper, enough cooling to make sure comfortable feeling.
- Precision calculation on handle inside light refraction angle makes sure high laser power output.
- Lightweight design, easy hold and handle weight is only 300g, easy operation.

Handle mode	STO-Ocean-600-S	STO-Ocean-600-L
Laser energy range	0-120J	0-120J
Frequency	1-20Hz	1-20Hz
Laser stack	Micro channel	Micro channel
Wavelength	1064nm	1064nm
Spot size	11mm×11mm	17mm×10mm
Skin contact materials	Sapphire	Sapphire
Skin contact cooling	2pieces (55W per piece)	2pieces (55W per piece)
Cooling water flow rate	>2.4L/min	>2.4L/min
Cooling water	Deionized water	Deionized water

4. STO-Bright Series Laser Hair Removal Handles

STO-Bright series hair removal handles are the breakthrough in using the big spot size 30mm×20mm diode laser treatment handles with the Germany 1200W 810nm micro channel diode laser. Sliding treatment has a better effect on therapeutic efficiency.

The spot sizes are 30mm×20mm, 20mm×20mm, 20mm×10mm optional. Besides standard models, we can offer many kinds OEM services and products.



- 30mm×20mm big spot size

- up to 1200W optical power
- Micro channel diode laser optional
- Fast laser hair removal

Handle mode	STO-Bright-1000-3020	STO-Bright-1000-1040	STO-Bright-1000-2010	STO-Bright-1200-3020	STO-Bright-1200-1040	STO-Bright-1200-1040
Laser power	1000W	1000W	1000W	1200W	1200W	1200W
Laser stack	Micro channel	Micro channel	Micro channel	Macro channel	Macro channel	Macro channel
Wavelength	810nm (755nm and 1060nm available)					
Spot size	30x20mm	10x40mm	20x10mm	30x20mm	10x40mm	10x40mm
Skin contact cooling	Aviation aluminum + Sapphire +TEC					
Cooling water flow rate	>4L/min			2L±10%		
Cooling water	deionized water			distilled water		

Remark: In addition to the standard models, the number of laser chip can be customized and the number of laser chips is 3-30pieces optional. The spot size 10x20mm and 15x25mm are also available.

Application Principle

The wavelength of STO-Bright series diode lasers is around 810nm. The chromophores include melanin, hemoglobin and water can absorb such near infrared light. Laser light is absorbed by target of these three color groups and produce thermal effects, resulting in the following therapeutic effects:

- Diode laser's reaction in dermal tissue collagen cells and connective tissue, induces the synthesis of new collagen cells and extracellular matrix, without interfering with or damaging the epidermis, improve wrinkles, scars and pits elastic tissue degeneration and other issues.
- At the same time promoting the dermal collagen and connective tissue structural changes, the diode laser also plays the role of melanin in dermal tissue and blood vessels to make them thermal decomposition, also dermal and epidermal pigmentation reduction, reducing telangiectasia to improve overall skin texture more smooth and gloss. Concerned with improving the problems are: photo-aging, age spots, redness, skin bleak, filled with shape-related vascular and pigmented erythema and rosacea and other issues.
- Permanent hair removal. Moderate laser beam penetrates the epidermis and selectively makes action on the hair follicle cells to stop growing, so as to achieve the effect of the permanent eliminate unwanted hair.

Our Core Technologies

- STO-Bright series is the breakthrough in using the big spot size 30mmx20mm diode laser treatment handle with the Germany 1200W 810nm micro channel diode lasers. It can realize fast hair removal.
- The spot size are optional which can satisfy customer's needs. The optional sizes are 30mmx20mm, 20mmx20mm, 20mmx10mm.
- Germany micro channel cooled diode stack, Seiko creation, ingenuity quality.
- Our new mounting technology with hard solder special for medical beauty research with greatly improved diode lifetime.
- 2pcs 55W Peltier cooler, matched to cooling spot which is made of sapphire packed with gold coated cooper, enough cooling to make sure comfortable feeling.
- Precision calculation on handle inside light refraction angle makes sure high laser power output.
- Lightweight design, easy hold, handle weight is only 300g, easy operation.

5. OEM Pack Laser Hair Removal Handles

We can supply OEM pack of laser hair removal handles to the system integrators with 400W-1200W circuit control systems including laser power, beauty machine control and supporting water flow sensor, ion sensor, touch screen etc. The OEM pack can be suitable to all our laser hair removal handles as above.



1. Micro channel diode laser handle 755nm/810nm/1064nm; 10.4inch color touch screen; 3. Screen cable; 4. Control board; 5. Power supply for laser bar; 6. Power supply for control board and Peltier; 7. Power supply for pump; 8. Electrical wire; 9. 3 water DC brushless pump; 10. Foot pedal switch 11. Fan cover 12. Electric fan; 13. Ion-exchange water filter; 14. PP filter; 15. Tank; 16. Protective glasses goggles; 17. Glasses; 18. Cable tie; 19. Hose barb water valve; 20. Water pipe adapter; 21. Hose; 22. Transparent hose; 23. Power cable; 24. Pedal connector; 25. Power interface; 26. U type pre-insulated connecting terminal; 27. Screw; 28. Water funnel; 29. Water temperature sensor; 30. Water flow sensor; 31. Key switch; 32. Self-lock emergency stop switch; 33. Handle connector.

Our Core Technologies

We have concentrated on diode laser hair removal industry many years, and continue to become more professional of the interface operation, not only have the professional interface for the doctor use, but also has easy operate interface. At same time, it has many hair removal program and OEM mode optional.

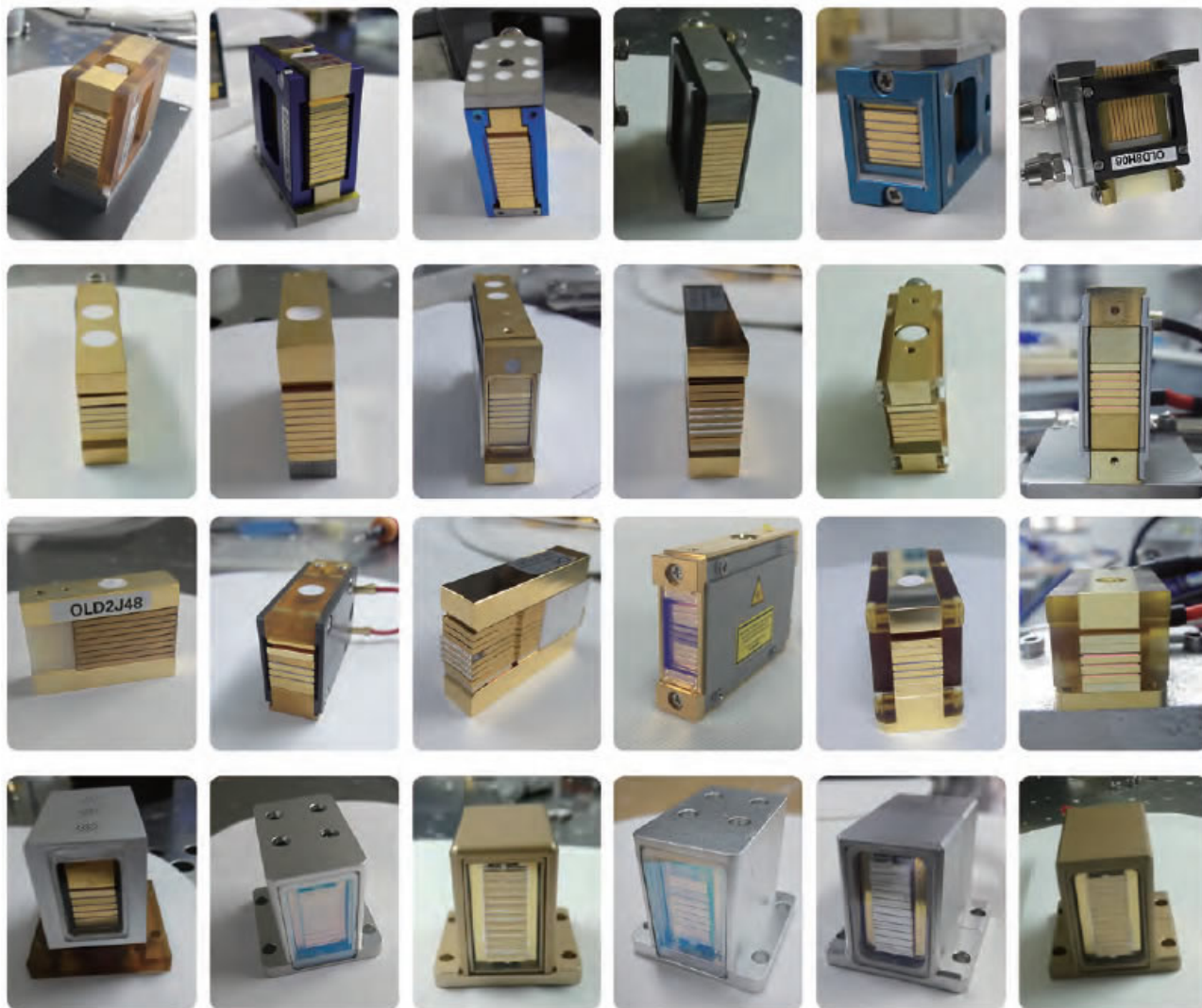
Control Circuit and Laser Power

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We are a professional diode laser manufacturer and very familiar with diode laser hair removal system's performance and configuration. Our 400W-1200W circuit control systems can be used in both portable frame and vertical frame with compressor cooling system.

6. Repair Services of Handles

We provide diode laser stack repair service and laser hair removal handle refurbishment for various brands in the market. Our experienced technicians can provide various of handle repair and refurbishment services with high quality. We use top quality diode bars from Germany and strictly control each process of repairing to make all the repaired handles have long life time and high reliability. We supply various diode stacks for laser hair removal. These stacks can custom-designed and –made according to your specific requirements.



ModelNo.	STO-VS-MI-100-N
Application	Laser hair removal handles
Operation mode	CW
Bar numbers in one stack	N=1-20 bars
Power per sub-mounts	100W
Central wavelength at 25 °C	810nm/755nm/1064nm
Typical Operation current	90A
Maximum Operation current	100A

We provide various services to both laser manufacturers and end users with the following advantages:

- Fast Services: Usually regular laser heads can be repaired and returned within 3 days.
 - High Quality Diodes: The repaired lasers will be equal or even better than original laser heads in
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performance with powerful output power and excellent beam quality.

- Lower Cost: Reduce the cost for laser system maintenance.
- Warranty: Our warranty is 12 months.
- Customization available upon request.

