PICOHI™ 300

300ps

Experience photoacoustic effect

PICOHI 300 picosecond laser

For Export

PICOHI™ 300

Experience, the real photoacoustic effect

1 Next generation pico laser **Real 300ps pulse duration**

Stable technology providing pulse duration of 300ps.

2 Non-photothermal effect, **Photomechanical effect treatment**

Upgraded from photothermal effect treatment, photomechanical effect treatment allows selective treatment on targeted areas.

3 Various handpieces for **improving of skin rejuvenation**

DOE & MLA handpieces can provide various types of treatment in multiple sizes and depths depending on the treatment area.

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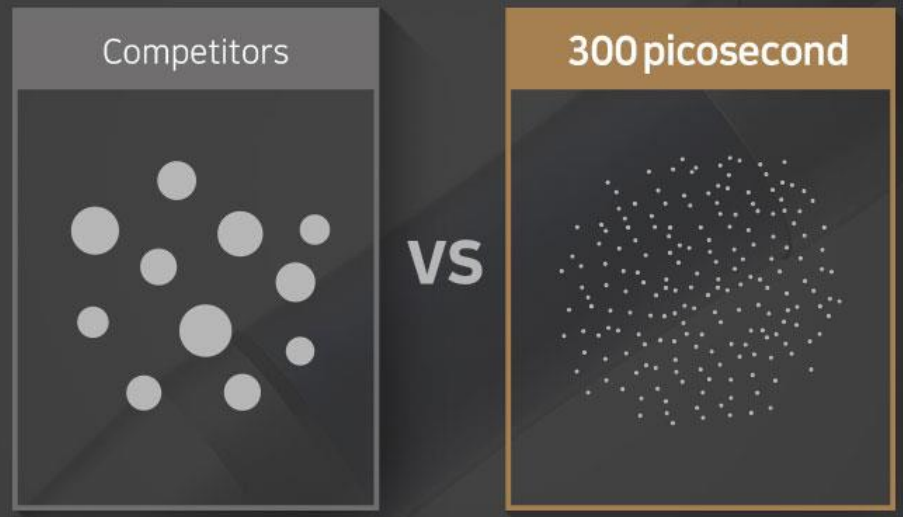
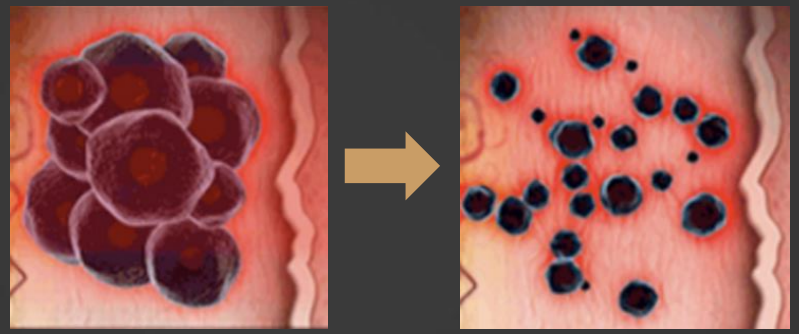
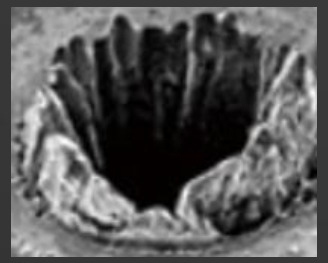
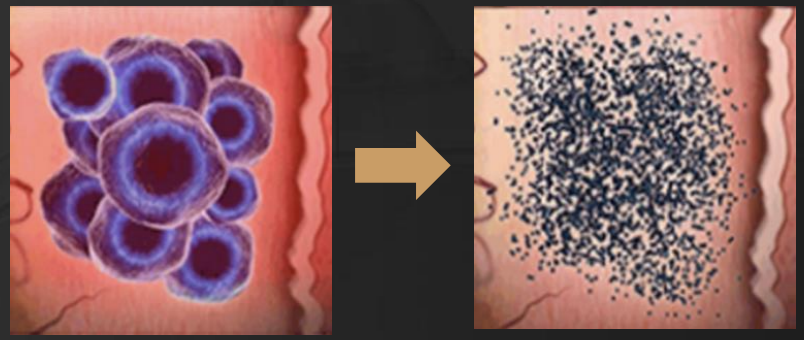
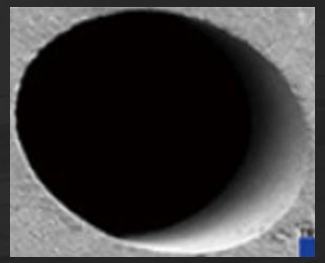
Why 300ps?

- Stress Relaxation Time(SRT) of 1㎛ melanosome is 300ps.
  The shock wave caused by the picosecond pulse acts only on the melanosome without being transmitted to the surrounding tissues.

- Thermal Relaxation Time(TRT) of 10–100nm tattoo ink particle is 100ps-10ns.
  300ps is equipped with appropriate pulse duration to destroy smaller particles than other picoseconds lasers.

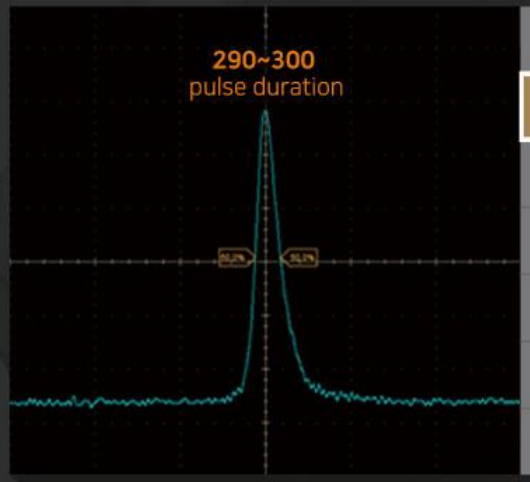
- Micro bubble occurs in the skin more strongly by high peak power related to shorter pulse duration. High peak power with 300ps pulse duration increases LIOB formation and skin rejuvenation effect.



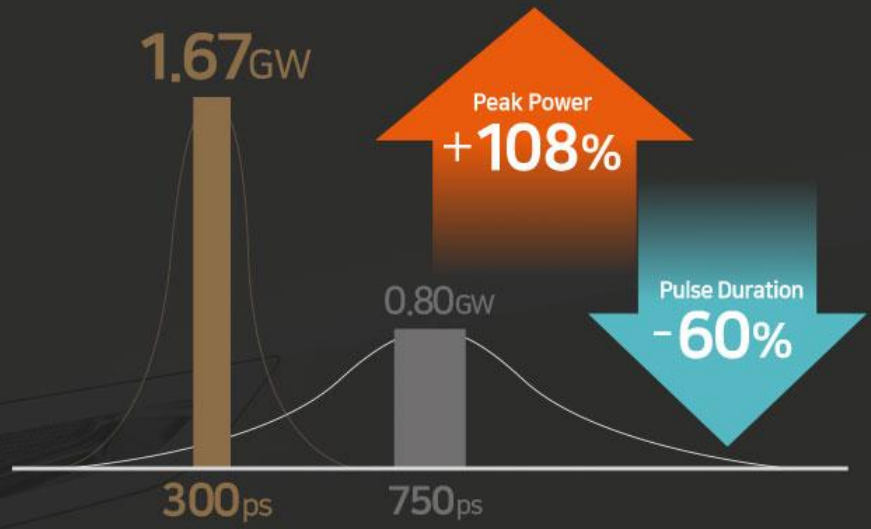
Nano Laser	Pico Laser
Photothermal effect	Photomechanical effect
Not precise destruction of melanin pigment Damages on near by tissues	Precise destruction of melanin pigment Targeting on the pigment is possible with great damage effects
  [Marks after Nanosecond laser] The heat damages melanin pigment and affects the surrounding tissue.	  [Marks after Picosecond laser] Physical destruction on melanin pigment while having no affects on the surrounding tissue.

High Power

300 picosecond pulse duration



	Pos Wid
Value	295.6ps
Mean	291.75525p
Min	283.4p
Max	299.9p
St Dev	5.309p
Count	8.0



Peak power higher than Q-switch or other pico lasers provide
maximum effect on tattoo removal, pigment treatment and skin rejuvenation.

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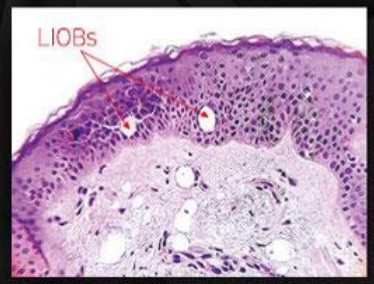
High Effect

LIOB effect with PICOHI VMLA handpiece (biopsy result)

Bubble within the skin helps to regenerate tissues which create new collagen for skin rejuvenation effect. MLA & DOE handpieces of PICOHI provides effective rejuvenation treatment.



Rejuvenation

VMLA H/P

Precise treatment at different layers from Deep dermis to Epidermis with 13mm beam size.

Depth depending on the target can be adjusted(0.5mm)

ZMLA H/P

Cover the various lesion sizes and providing effective results.

Adjustable Beam Size depending on the treatment (4~12mm)

DOE H/P

Synergy rejuvenation effect with MLA handpieces.

Very even energy uniformity with 10mm(7*7 dots) spot size

Pigmentation

Collimated H/P

Stable and effective toning treatment with same spot size regardless of laser separation distance.

1064nm Collimated / 10mm spot size

Zoom H/P

Various pigmentation treatment possible.

532nm · 1064nm basic zoom / 2~10mm spot size

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PICOHI 300

Tattoo Removal

Clinical Data

Lentigine Treatment | after 1 treatment

532㎚ Zoom : 3㎜ · 0.3J/㎠ · 1pass

Tattoo Removal Treatment | after 1 treatment

1064㎚ Zoom : 3㎜ · 1.96J/㎠ · 1pass

Scratched Scar Treatment | after 1 treatment

ZMLA : 5㎜ · 1.3J/㎠ · Stacking

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PICOHI™ 300

Zoom H/P
1064nm, 532nm

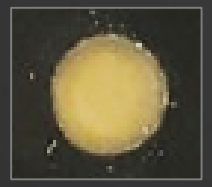
Collimated H/P
1064nm

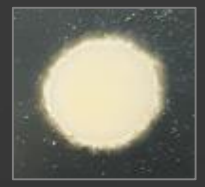
VMLA H/P
1064nm, 532nm

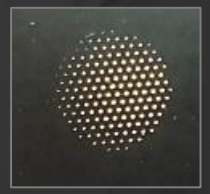
ZMLA H/P
1064nm, 532nm

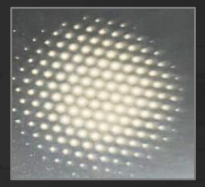
DOE H/P
1064nm

DOE H/P
532nm





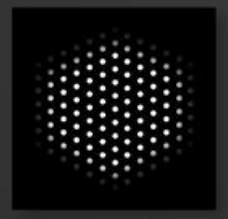




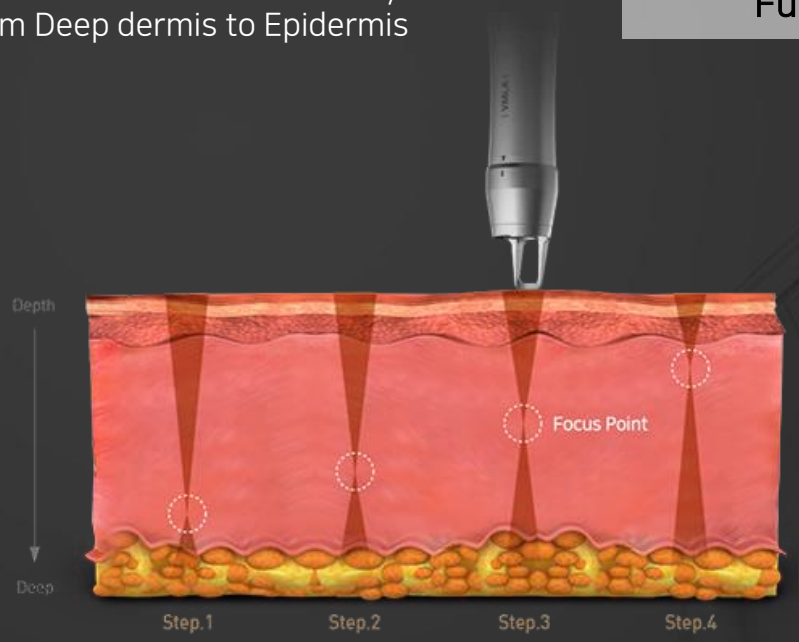
For Export

VMLA PICOHI™ 300 ZMLA

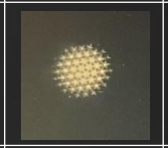
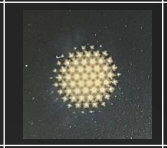
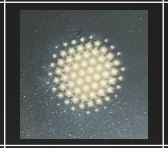
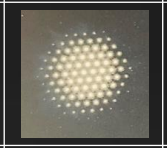
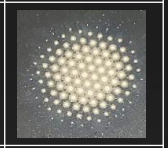
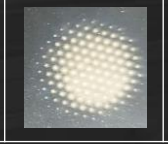
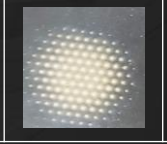
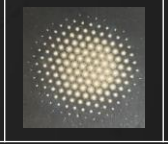
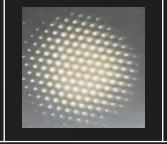
	Feature	
Depth depending on the target can be adjusted (0.5mm)		Adjustable Beam Size depending on the treatment (4~12mm)
Precise treatment at different layers from Deep dermis to Epidermis	Function	Adjustable Beam Size depending on the treatment for effective results



Beam mode image



[ZMLA LASER TOP VIEW]

Beam Size	4	5	6	7	8
Energy (mj)					
Beam Size	9	10	11	12	
Energy (mj)					

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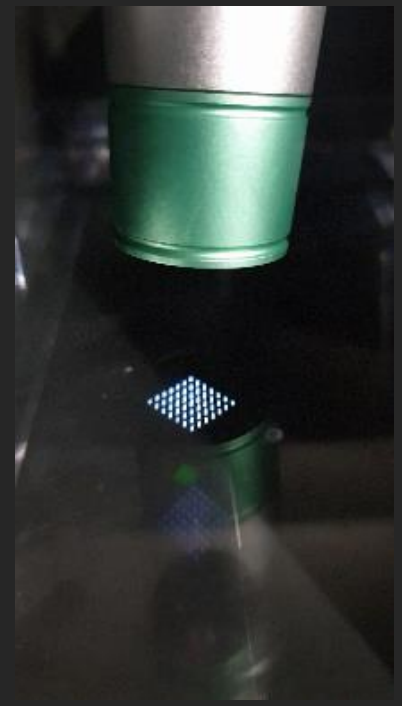
MLA(VMLA, ZMLA)	PICO Fractional	DOE(532nm, 1064nm)
Very High	Energy Efficiency	Relatively Low
Relatively Low	Energy Uniformity	Very Even
Scar Curing Rejuvenation Pigmentation	Scope of Use	Pigmentation Rejuvenation Scar Curing

Real MLA Beam



Real DOE Beam

Output Energy : 500mJ / 5Hz

PICOHI provides MLA, DOE for selective use for effective treatment

Comparison of Minimum Energy at Zoom HP(1064nm)

Spot Size	Minimum Energy(mJ)		Minimum Fluence(J/㎠)	
	450ps	PICOHI 300	450ps	PICOHI 300
2mm	131	3.1	4.1	0.1
3mm	134	7.1	1.9	0.1
4mm	138	12.6	1.1	0.1
5mm	137	19.6	0.7	0.1
6mm	141	28.3	0.5	0.1
7mm	153	38.5	0.4	0.1
8mm	X	50.2	X	0.1
9mm	X	63.6	X	0.1
10mm	X	78.5	X	0.1

Comparison of Minimum Energy at Zoom HP(532nm)

Spot Size	Minimum Energy(mJ)		Minimum Fluence(J/㎠)	
	450ps	PICOHI 300	450ps	PICOHI 300
1.5mm	X	1.8	X	0.1
2mm	72	3.1	2.3	0.1
3mm	70	7.1	1.0	0.1
4mm	75	12.6	0.6	0.1
5mm	78	19.6	0.4	0.1
6mm	84	28.3	0.3	0.1
6.5mm	X	33.2	X	0.1
7mm	76	38.5	0.2	0.1
7.5mm	X	44.2	X	0.1

The Fluence(J/m2) which indicates "Energy per unit area" can be adjusted from 0.1J/m² to a wide energy range in a sensitive way compared to 450ps.

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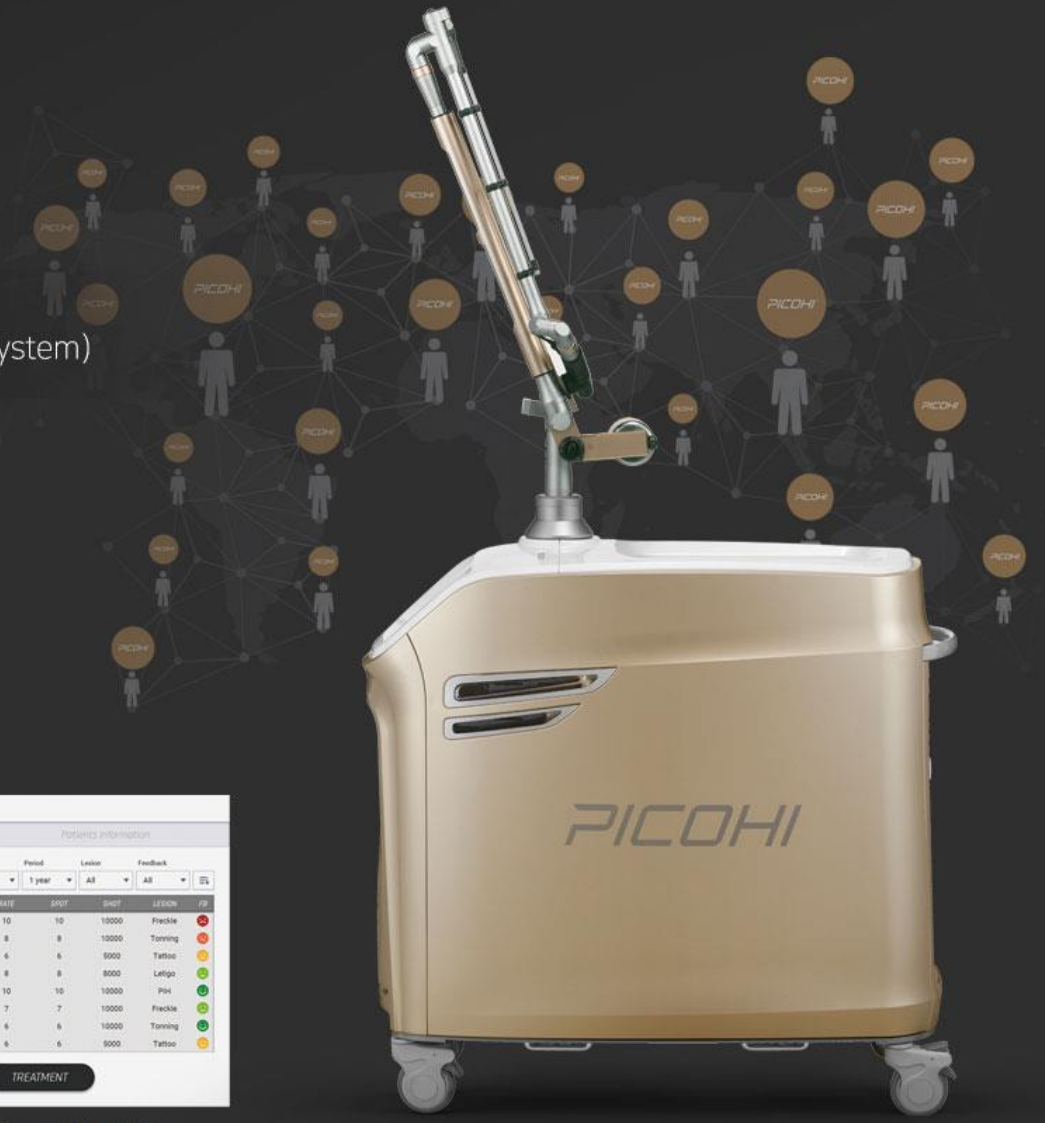
High Convenience

RMS system (Remote Maintenance System)

Patient History Record

Fast and smart treatment is possible as the parameters for previous treatments will be recoded and memorized. The saved parameters can be managed through history for future treatments which may be a similar case.

| Real Time Device Record Check |



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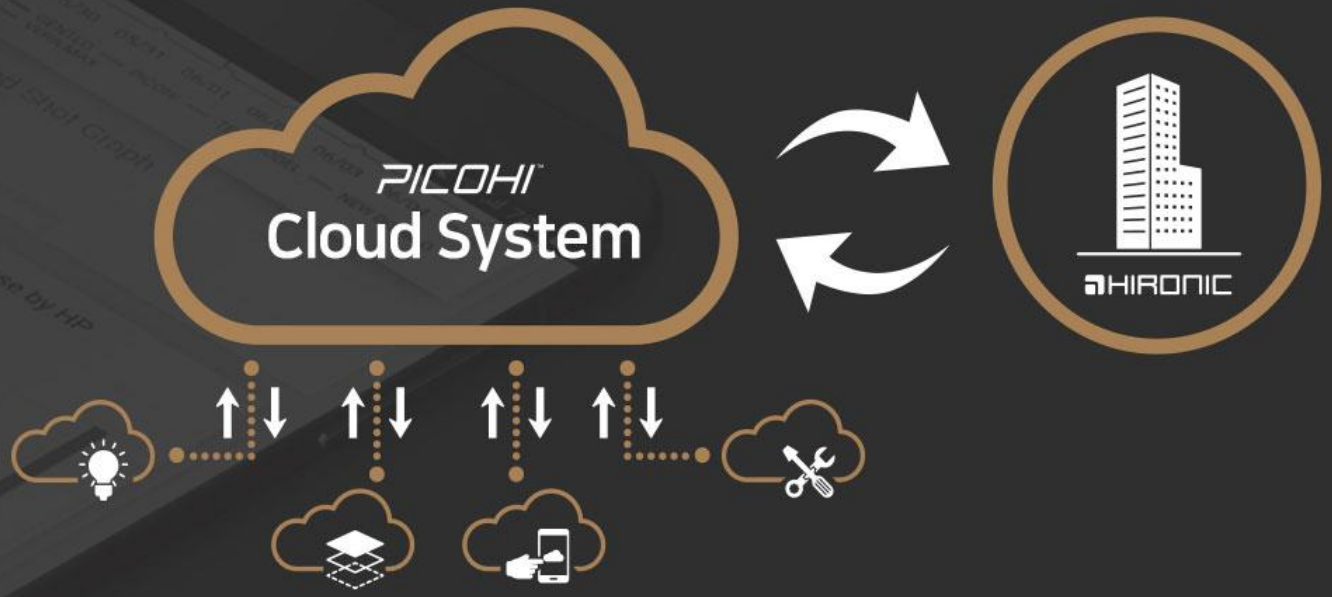
Remote Management through Cloud System

- Lamp and consumable replacement notice
- Protocols saved
- Self diagnosis and inspection
- Malfunction prevention and assist functions



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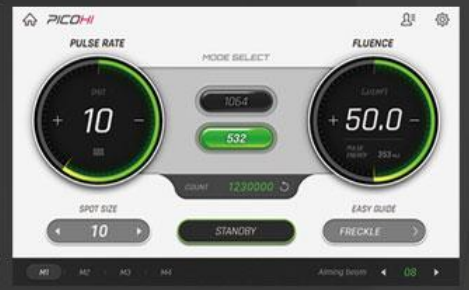
Easy & Intuitive GUI

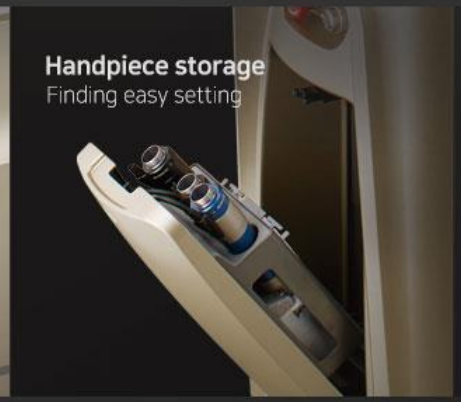
Treatment Information

Treatment Malfunction Prevention (coloring system)



Different colored GUI (Blue for 1064nm, Green for 532nm) for exact and safe treatment.

Easy to Use



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PICOHI Specification

Wavelengths		Nd:YAG 1064nm, 532nm
Pulse Duration		300ps, 275ps
Peak Power		1.67GW, 0.91GW
Pulse Energy[mJ] Max		500mJ, 250mJ
Repetition		1, 2, 5, 10Hz
Handpiece	Zoom H/P	1064nm (Spot size : 2 to 10mm)
		532nm (Spot size : 1.5 to 7.5mm)
	Collimated H/P	1064nm (Spot size : 10mm)
	VMLA H/P	1064nm (Beam size : 13mm)
	ZMLA H/P	1064nm (Beam size: 4 to 12mm)
	DOE H/P	1064nm (Beam size: 10 x 10mm)
		532nm (Beam size: 10 x 10mm)
Convenience system		RMS System (WIFI)
		Wide LCD 12.1"
		Upper shelf display zone
		Handpiece storage
		Hidden front handle & Back handle
General	Electrical Power	200~240 VAC, 4.4 KVA, 50/60Hz
	Dimensions	455(W) x 1040(L) x 975(H) mm
	Weight	150kg

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