

Portable Fiber Laser Marking Machine

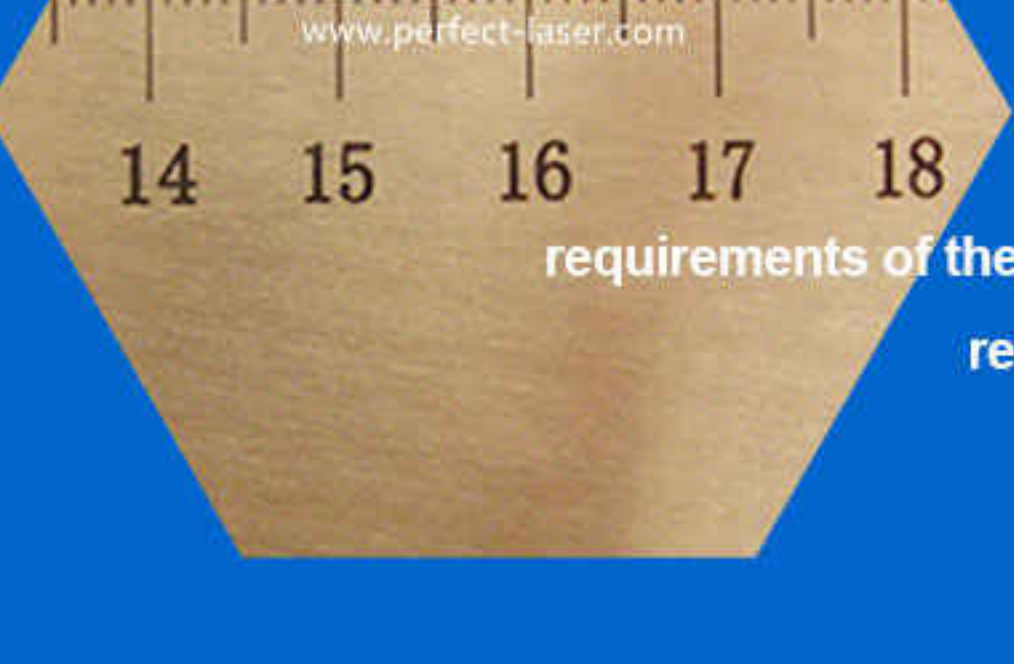
Model: PEDB-400 series



- World Brand
- Portable Design
- 2 Years Warranty for Fiber Laser Source
- CE FDA Honors
- Multi-Language Service

Perfect Marking Results

Perfect Marking Results
This machine can meet user requirements of the various elaborate patterns in tiny surface, regarded as a veritable "King Laser Marker".



High-Rate of Electrical-Optical Conversion.

No power coupling loss, saving operating costs, the laser device has 100,000 hours life time, maintenance-free and no consumables.



High Speed High Efficiency

It significantly improve the marking quantity in the same time, accelerate user's return of the investment.

Integrated Structure

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Whole Machine

No Consumable, free of maintenance using for more than 10 years.

Technical Data

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Model	PEDB-400C
Laser Source	L Fiber Laser
Output Power	10w / 20w / 30w / 50w
Wavelength	1060nm
Beam Quality	<2
Repeat Frequency	10khz-100khz
Pulse Energy	2mJ
Beam Divergence	-0.3 to +0.3mrad
Laser Class	IV
Resolution	18μ
Repeatability	50μ
Marking Scope	110mmx 110mm / 175mmx 175mm (optional)
Linear Speed	800 character/ s
Marking Linear Speed	≤12,000mm/s
Marking Depth	Max. 1.0- 1.5mm (hard steel)
Min. Line Width	0.012mm
Min. Character Size	0.15mm
Repeat Accuracy	±0.003mm
Input Power	0.5kw
Electrical Source	220v/50hz or 60hz

Comparison with Ordinary Fiber Marking Machine

Marking Items	PEDB-400 Fiber Laser Marker	Ordinary Fiber Laser Marker
Transparent Button	Available Mostly, Have Excellent Effect	Rough and Poor Contrast
Keyboard	Smooth and High Contrast	Rough and Poor Contrast
Plastic Mobile Cell	Smooth and High Contrast	Rough and Poor Contrast
Mobile Charger	Smooth and High Contrast	Rough and Poor Contrast
Anodised Aluminum	Smooth and Non-Handle	No Such Function
Deep Mark on Aluminum	Fine Shade	Rough Shade
Thick Aluminum	No Deformation	Deformation of Substrate, Bulging
Vacuum Plating Marking	Supreme Efficiency, No Damage to Parts	Damage to Substrate
Bitmap Marking	Available for Marking Precise Bitmap	No Such Function

	PEDB-400 Fiber Laser Marker	Ordinary Fiber Laser Marker
Frequency Range (kHz)	1-1000	20-60
Impulse Width (ns)	4-200	200
Light Off Time (μS)	1μS	200
Light Leak	No	yes
Time of Light off (μS)	2	200
Power Stability for Long Time	<3%	<4%
Diameter Of Laser Beam (mm)	6-9	6-9
Fault Rate	< 2%	> 5%

PEDB-400 Fiber Laser Marker VS Ordinary Fiber Laser Marker

High contrast on color, neat edge, smooth surface	Marking On Plastic Comparison	Dull color, serrated edge, rough surface
No deformation on marking	Marking On Thin Metal Sheet Comparison	Serious deformation on marking
Almost no heat affected, fine results	Heat Effects On Metal Marking Comparison	Large area of Heat affected, the melt splashed on the edges
Short time of turning laser off with high marking efficiency	Marking Speed Comparison	Longer time for turning laser off to lower marking efficiency (more than 300μs every line)

0 (μs)

300 (μs)

1500 (μs)