FLAST-NanoMARK 100W
Fiber Laser Material Processing and Marking System

FLAST-NanoMARK series Fiber Laser Material Processing and Marking System is a proprietary product of FiberLAST. The robust mechanical structure of the system and unique electronical control mechanism ensures long life span and minimizes maintenance requirements. The unique beam quality and high peak power of FLAST_NanoMARK guarantees high performance for your application. The beam quality of the system allows sensitive processing even at low average powers when needed. These features provide the user with a precise and wide range of processing capabilities. In addition, the laser system is pulse modulated and has a special driver that can change the pulse shape. With the advantages and unique technology it offers, it is rewarded with the TÜBİTAK Technology Awards, the Innovative Creative Idea Award of TESİD, and the Technology Incentive Award of METU Prof. Dr. Mustafa N. Parlar Education and Research Foundation in the first place.

Applications

- Material processing
- Marking
- Cutting
- Engraving
- Micromachining
- Surface hardening
- Surface cleaning

Features

- Proprietary and unique design
- 7/24 operation
- Maintenance free
- Air cooling
- Low energy consumption
- High beam quality
- Humidity & temperature monitoring
- Power electronics control
- Built-In-TEst and log record
- Ready error and operation indicators
- Automation system integration
- Communication options with different databases
- 10 years spare parts & service guarantee
- ISO and CE certificated

FiberLAST Fiber Laser Systems and Technologies Inc.

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OPTICAL PROPERTIES		
Brand/Model	FiberLAST/FLAST-NanoMARK	
Laser Type	Yb (Ytterbium) Fiber Laser	
Operation Mode	Pulsed	
Wavelength	1064±2 nm	
Average Power	100W	
Laser Architecture	MOPA	Q-SW
Repetition Rate	100-250 kHz	80-120 kHz
Pulse Energy	1 mJ	1,25 mJ
Pulse Length	50-250 ns	100 ns
Power Stability	≤%2	
Polarization	Random	
Laser Output	Collimator with back reflection protection	
Output Beam Diameter	7±1mm	
Output Fiber Length	2m	
Aiming Beam	Integrated	

GENERAL FEATURES	
Dimensions (GxDxY mm)	375 x 550 x170 mm
Weight	20 kg
Cooling	Air
OperatingTemperatureRange	10 - 40 □
Operating Voltage	177 - 264 VAC
Power Consumption	480 W

SCANHEAD SPECIFICATIONS	
Lens (Standard Recommended)	F:163 mm
Marking Area (1)	120 x120 mm
Marking Speed	6000 mm /sec
Operating Temperature Range	10-40°C
Repetition	≤22 µrad
Positioning Speed	15 m/second
Control Interface	XY2-100
Weight	1,9 kg

Item (1): It is the marking area of the F:163 mm lens offered as standard, and the marking area varies with different optional lenses

Z-Stage	
Operable Distance	500 mm
Dimensions	150x211x722 mm (Manuel) or 150x211x753 mm (Motorized)
Weight	8,5 kg

A manual lift is offered as standard in the set, and a motorized lift is offered as an option.

MARKING SOFTWARE	
Brand	EZCAD or SAMLight (Optional)

OPTIONAL PRODUCTS

Laser Protective Cabinet

Divisor

Laser Safety Goggles

Fume Extraction Systems