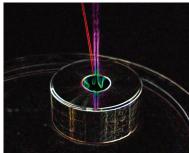
WITH HUNDREDS OF SYSTEMS INSTALLED IN PRODUCTION LINES, OVER THE YEARS BLITZ DEMONSTRATED TO BE ONE OF THE MOST STABLE AND RELIABLE OEM FIBER LASER SYSTEM TODAY AVAILABLE IN THE MARKET

Blitz was developed by a strong collaboration between Laserpoint, with more than 30 years of expertise in laser marking and micromachining solutions, and IPSES that, since 2003, designs and builds high-level solutions



for industrial manufacturing, aerospace & defense, automotive & transport applications, focusing especially on testing, automation and embedded system development. The deep knowledge of the laser/matter interaction and of industrial processes and systems, allow us to really **identify the best technology** and operation point for your application, because a laser must work well not only in a laboratory, but in your environment. Furthermore, we can support you in all the processes of installation and integration in your production line, offering a wide range of services from standard to fully customized solutions both hardware and software.



IPSES scientific electronics

LASERPCINT

SERVICES

- Trial marks on UUT to determine laser technology
- On-site customer facilities survey and analysis
- On-site integration, installation and configuration
- Hardware customization
- Software customization
- Software integration in test sequences
- Long-term support and maintenance
- Extended warranty and support even with fast reaction
- · Migration and re-engineering
- Obsolescence elimination

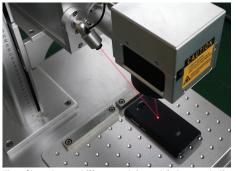
CONTACTS

IPSES S.r.I.

via S. Lazzarotto 10 - 20020 CESATE (MI) IT ph: +39 02 39449519 - info@ipses.com

Laserpoint S.r.l.

via Burona 21-20090 VIMODRONE (MI) IT ph: +39 02 27400236 - sales@laserpoint.it



BLITZ

OEM FIBER LASER SYSTEM

High-resolution modular OEM fiber laser system for marking and micromachining industrial applications

The fiber laser **Blitz** combines high-resolution and competitive costs, enabling optical marking conditions on a wide range of materials, from plastics to metals, ensuring reliability, speed and repetitiveness of the results.

Blitz can withstand hostile environments, assuring reliability in production lines. Its small size allows can easily integration in where the space is really limited. Besides, it is extremely flexible and adaptable thanks to the possibility to select both **pulsed and linear sources** from 10W to 100W and head scanning with working area up to 290x290 mm² even with integrated motorized control. The length of its fiber can be extended up to 5 meters, to meet all the different needs of installation, even in highly critical environments, without losing reliability thanks to its structure in welded fiber.

The **software** provided with allows, in a quick and intuitive way, to generate the geometries to be engraved, to control the laser and the scanning head: the use by the operator is immediate and safe with very low integration time.

All these reasons make **Blitz** one of the most stable and reliable marker available in the market.



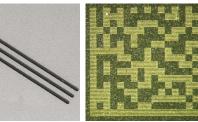


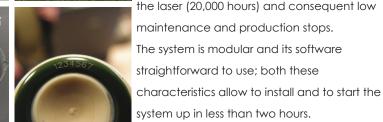
















APPLICATIONS

• Optoelectronic devices

WITH EFFICIENCY AT A COMPETITIVE COST

doped fiber laser of which Bliz is composed

resolution and excellent contrast markings on all metals and their alloys, ceramics, semiconductors and many plastic materials.

operational costs content (in the 20P version, Blitz consumes less than 300 W), long life of

The system is extremely efficient, with

- Automotive components
- Silicon milling
- PCD tools
- Medical devices
- · Diamond drilling
- Plastic seals

BLITZ IS THE BEST CHOICE FOR ANY INDUSTRIAL APPLICATION WHERE A ROBUST COMPACT DURABLE MARKING SYSTEM WITH HIGH BEAM QUALITY, REPEATABILITY, AND STABILITY ARE REQUIRED

EXCEPTIONAL QUALITY AND RELIABILITY COMBINED

TECHNICAL SPECIFICATIONS

PARAMETER	BLITZ 50P	BLITZ 20P
M2 PARAMETER (TYPICAL)	1.4	1.4
Pulse energy	1 mJ	1 mJ
Peak power FWHM at 20 kHz repetition rate	> 8.2 kW	> 8.2 kW
MAXIMUM AVERAGE OPTICAL POWER*	50 W	20 W
OUTPUT POWER DYNAMIC RANGE	10-100 %	10-100 %
Output power stability (4H)	2 rms %	2 rms %
OPERATING WAVELENGTH	1065±10 nm	1065±10 nm
Pulse width at 20 kHz	< 120 ns	< 120 ns
Pulse repetition rate	20-80kHz	20-80kHz
Polarization	Random	Random
Typical output fiber length	3 m	3 m
MAXIMUM OUTPUT FIBER LENGTH	3 m	3 m
MINIMUM ACHIEVABLE LASER SPOT (@FL 100mm)	<12 µm	<12 µm
Nominal working distance**	175 mm	175 mm
Working area (@FL 160)**	110 x 110 mm	110 x 110 mm
Step response time (setting 1% of full scale)	0.4 ms	0.4 ms
Step response time (setting 10% of full scale)	1.2 ms	1.2 ms
Maximum marking speed (@ FL 160mm)	2.5 m/s	2.5 m/s
Maximum positioning speed (@ FL 160mm)	10 m/s	10 m/s
Repeatability	<22 µrad	<22 µrad
Long-term stability (8H)	<0.3 mrad	<0.3 mrad
WARM UP TIME	10 min	10 min
Mains requirements	220 VAC	220 VAC
Storage temperature range	from +10 to +50 °C	from +10 to +50 °C
OPERATIVE TEMPERATURE RANGE	from 15 a +35 °C	from 15 a +35 °C
RELATIVE HUMIDITY	from 15 to 80 %	from 15 to 80 %
WEIGHT (SCAN HEAD WITHOUT OBJECTIVE)	1 kg	1 kg
WEIGHT (LASER)	17.5 kg	17.5 kg
System power consumption	290 W	290 W
Cooling system	Air	Air
Dimensions (Laser) WxHxD	450 x 183 x 440 mm Rack4U	450 x 183 x 440 mm Rack4U
DIMENSIONS (SCAN HEAD) WXHXD	95.6 x 94 x 114 mm	95.6 x 94 x 114 mm

^{*}Other laser sources available

NOTE

- Other pulsed laser sources available from 10W to 100W
- CW laser sources available
- Variable Z-axis focus adjustment available



^{**}Other focal lenghts and working areas available Specifications subject to change without notice