DPL Lexis Marker
2 W

The DPL Lexis Marker from the Business Diode series operates at a wavelength of 355 nm in the ultraviolet region and opens up new opportunities for marking a large number of organic and inorganic materials.

Properties

This laser specialises in the precision marking of plastics and glass. During the laser marking process, the material is heated only very slightly. This means that incredibly high-contrast and extremely low-impact marking is possible even on easily damaged and highly sensitive products. The thermal and mechanical stress to which the material is subjected is virtually non-existent. The thermoelectric air cooler keeps the laser stable during operation and is low maintenance. Air/water coolers and water coolers are not used for these lasers, sparing users laborious maintenance work. This system is a laser safety class 4 solution. To upgrade the system to laser safety class 1, ACI offers a number of different laser stations as an all-in-one solution.

Software

The laser system is controlled using our proprietary Magic Mark marking software. This software enables workpieces to be marked with text, graphics, codes (data matrix codes, barcodes), serial numbers and logos. It can also be used to achieve uniform markings around the perimeter of workpieces with rotational symmetry. An intelligent user privilege management system facilitates the creation of different user groups. This way, the laser system can be adjusted to cater for the user's specific requirements. When using the laser system in automated production lines, fully automated operation – including data exchange with various data sources – can be achieved without any difficulties. Optionally, plugins such as the code or script module can be used to add extra functions to the Magic Mark software.

Find out more about software add-ons

Material

Metal	
Temper the metal	○
Engrave metal	○
Remove metal	●
Plastic	
Foam plastic	●
Carbonize plastic	●
Engrave plastic	–
Laser foil	
Foil removal	●
Foil color cover	●
Glass	○
Ceramics	○
Wood, paper, leather	○

– not suitable ○ well suited ● very suitable

Compatible manual workstations

FoilStar
Workstation Classic
Workstation Comfort
Workstation Professional
Robot-assisted laser station
Rotary indexing table
Workstation Professional XXL

Compatible accessories

Fixed-mount reader
Tool reader
AOI
CPM
Software connections
Laser extraction systems
Laser safety
Magic Mark
Contour Tool
Data Import plugin
FoilStar plugin
GS1-Generator
OCR Plugin
Ruler Scale plugin

Laser type	Nd:YVO4, third-harmonic generation
Mode of operation	Pulsed
Wavelength	355 nm
Laser power (max.)	2 W
Beam quality	$M^2 < 1.2$
Peak pulse power	Up to 1.4 kW
Pulse energy	>15 µJ
Number of pulse waveforms/pulse widths that can be set	10-15 ns
Pulse repetition frequency	40-200 kHz

Laser class	4, optionally 1		
F-theta lens (choose from options)	100	162	255
Size of marking area	60 x 60 mm	95 x 95 mm	140 x 140 mm
Typical working distance	155 mm	248 mm	398 mm
Power consumption	Max. 220 W		
Dimensions (l x w x h)	740 x 201 x 233 mm		
Weight	20 kg		
Mains connection	85-264 V AC/6 A/50-60 Hz		
PC interfaces	USB 2.0		
Interlock connection	Two-circuit interlock, SD-ready		
Laser-control interface for	External emission indicator light, ready signal, 8 inputs/outputs that can be allocated for any use, optional connections for encoders		
Functional safety in accordance with EN ISO 13849-1	PLe		
Laser marking software	Magic Mark V3		