



DPL Nexus Marker 12 W

Lasers from ACI's Business Diode IR series are talented all-rounders. Their superior energy efficiency and beam quality make them a good option for marking anything from individual parts to large batches. These systems are typically employed in manual workstations for marking entire pallets of workpieces, and they can also be used in automated lines. The DPL Nexus Marker is a 12-watt system.

Properties

The excellent beam quality enables neat, precise marking on metals, plastics and ceramics. There are different power outputs from which you can choose, depending on the application and the time available for the marking process. All Nd:YAG lasers feature a thermoelectric air cooler. This enables the system to run for longer without the need for laborious maintenance work.

This system is a laser safety class 4 solution. To upgrade the system to laser safety class 1, all ACI's laser systems can be purchased in conjunction with various protective casings. This means that these laser systems can be used either as manual workstations or as integration components in an automated system.

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
- AOI plugin
- Contour Tool
- Data Import plugin
- FoilStar plugin
- GS1-Generator
- OCR Plugin
- Ruler Scale plugin

Laser type	Nd:YAG
Mode of operation	Pulsed
Wavelength	1064 nm
Laser power (max.)	12 W
Beam quality	$M^2 < 2$
Pumping technique	End pumping



Number of pulse waveforms/pulse widths that can be set	15-100 ns		
Pulse repetition frequency	1-100 kHz		
Laser class	4, optionally 1		
F-theta lens (choose from options)	100	163	254
Size of marking area	60 x 60 mm	110 x 110 mm	180 x 180 mm
Power consumption	Max. 600 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 interface	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, optional trimming interface		
Functional safety in accordance with DIN EN ISO 13849-1	PLe		
Laser marking software	Magic Mark V3		

