



DPL Smart Marker 4/10 W

Lasers from ACI's Economy Diode series are the ideal entry-level systems for small and medium-sized enterprises that need to undertake a moderate amount of marking work. You can choose between a 4 W system (Smart Marker I) and a 10 W system (Smart Marker II), depending on the application and the time available for the marking process.

Properties

The short resonator affords exceptional beam quality, which enables neat, precise marking on metals, plastics, ceramics and other materials. The lasers feature a thermoelectric air cooler. High-maintenance air/water coolers and water coolers are not used for these lasers, sparing users laborious maintenance work and costly downtime.

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

	DPL Smart Marker I/II
Laser type	Nd:YAG
Mode of operation	Pulsed
Wavelength	1064 nm
Laser power (max.)	4/10 W
Beam quality	M ² < 1.5
Pumping technique	End pumping



Number of pulse waveforms/pulse widths that can be set	15-100 ns		
Pulse repetition frequency	1-100/1-80 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. 300/400 W		
Dimensions (l x w x h)	603 x 201 x 235 mm 654 x 201 x 237 mm		
Weight	15/16 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, 4 inputs/outputs that can be allocated for any use		
Functional safety in accordance with DIN EN ISO 13849-1	PLe		
Laser marking software	Magic Mark V3		

