air..mark* Laser Marking Module

Compact. Powerful. Reliable.

The brand-new Air Mark combines laser head, power supply, beam expander and scanning unit for the first time in one, revolutionary small design. Based on the field proven NANIO AIR series, this all-in-one system is available with 16 W IR, 10 W green and 5 W UV, a variety of beam expanders and scanning systems perfectly adapted for your specific application. The Air Mark is the ideal OEM solution for industrial customers combining all standard purchased parts in one compact device using the XY2-100 scanner interface but leaving the proprietary control and software competences in the hand of our customers.

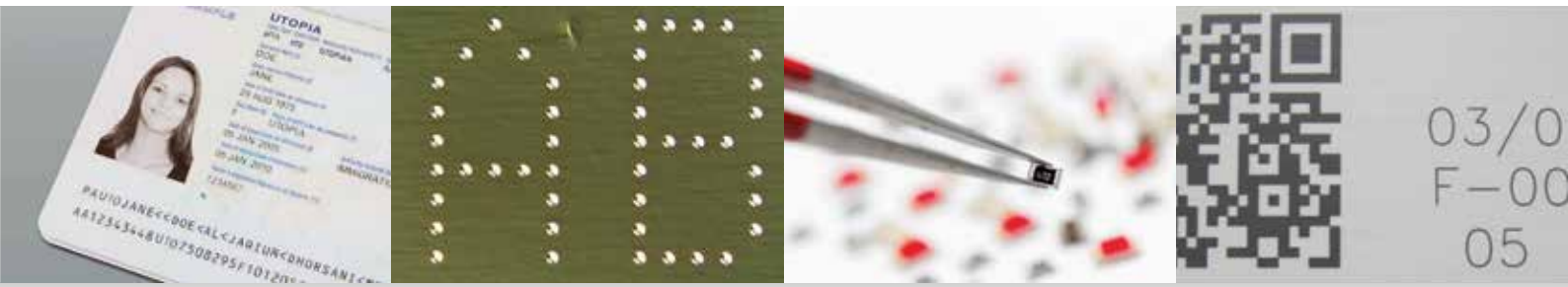
Applications

- PCB/Flex PCB Marking
- ID Card Marking
- Plastic Marking
- Ceramic Marking
- IC Marking

Features

- Compact all-in-one box design
- No power supply
- No umbilicals
- 24 VDC
- XY2-100 interface

(i) Air Mark – The world's first all-in-one DPSS laser marker combines superior performance and vibration-free air cooling in a revolutionary all-in-one design. Output powers up to 16 W and pulse widths below 10 ns minimize undesirable thermal damage of the material and enable consistent and reliable marking results.



Specifications

Model	355-5-V	532-10-V	1064-16-V
Laser Medium	Nd:YVO_4	Nd:YVO_4	Nd:YVO_4
Wavelength	355 nm	532 nm	1064 nm
Nominal Power	5 W @ 40 kHz	10 W @ 40 kHz	14 W @ 50 kHz
Repetition Rate	Single Shot to 300 kHz	Single Shot to 300 kHz	Single Shot to 300 kHz
Pulse Width	< 20 ns @ 40 kHz	< 30 ns @ 40 kHz	< 45 ns @ 50 kHz
Pulse Energy	125 µJ @ 40 kHz	250 µJ @ 40 kHz	280 µJ @ 50 kHz
Peak Power	> 6.2 kW @ 40 kHz	> 8.3 kW @ 40 kHz	> 6.2 kW @ 50 kHz
Pulse-to-Pulse Stability	< 2 % @ 40 kHz	< 1 % @ 40 kHz	< 0.5 % @ 50 kHz
Power Stability (rms, 8h)	< 2 %	< 2 %	< 1 %
Warm-up Time	< 20 min	< 20 min	< 20 min
Operating Voltage	24 VDC, 17 A	24 VDC, 17 A	24 VDC, 17 A
Laser Power Consumption	< 400 W	< 400 W	< 400 W
Cooling	Air	Air	Air
Ambient Temperature	15-35 °C (59-95 °F), non-condensing	15-35 °C (59-95 °F), non-condensing	15-35 °C (59-95 °F), non-condensing
External Control	RS232, USB, TTL and Analog Q-Switch Control, XY2-100	RS232, USB, TTL and Analog Q-Switch Control, XY2-100	RS232, USB, TTL and Analog Q-Switch Control, XY2-100
Dimensions (L x W x H)	500 x 135 x 314 mm (19.69 x 5.31 x 12.36 in.)	500 x 135 x 314 mm (19.69 x 5.31 x 12.36 in.)	500 x 135 x 314 mm (19.69 x 5.31 x 12.36 in.)
Weight	20 kg (44.1 lbs.)	20 kg (44.1 lbs.)	20 kg (44.1 lbs.)

InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice. Rev. 1.3, 04/2016.
InnoLas Photonics GmbH is DIN EN ISO 9001 certified.

Technical Drawing