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Laser SPA-F

PACKAGING		
Entry	Advanced	High-End

Marking of variable information on printed packaging
Extremely high lifetime
High quality high-speed marking



we're on it.

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Laser marking

The quality of industrial markings with lasers depends on the **reaction** of the marked **material** (color, coating, condition) and which laser is used (performance, wavelength).

Material reaction for fiber-laser

Material group	Material	Wavelength	Reaction	
Foil	Aluminum foil	1062 nm	+	
	Polyethylene terephthalate (PET)	1062 nm	+	
	Oriented polypropylene (OPP)	1062 nm	+	
Glass	Glass	1062 nm	-	
	Glass fiber	1062 nm	O	
Wood	Wood	1062 nm	-	
	Thermo-label	1062 nm	-	
	Board	1062 nm	O	
Ceramic	Ceramic	1062 nm	+	
Plastic	Polypropylene (PP)	1062 nm	+	
	Low density polyethylene (LDPE)	1062 nm	+	
	Polystyrene (PS, GPPS, HIPS)	1062 nm	+	
	Acrylnitril-Butadien-Styrol (ABS)	1062 nm	+	
	Polyacetal (POM)	1062 nm	+	
	Polyamide (PA)	1062 nm	+	
	Polycarbonate (PC)	1062 nm	+	
	Polyethylene (PET)	1062 nm	+	
	Polybutylene terephthalate (PBT)	1062 nm	+	
	Polyvinyl chloride (PVC)	1062 nm	+	
	Silicon varnished	1062 nm	O	
	Epoxy resin	1062 nm	+	
	Phenolic resin	1062 nm	O	
	Polyurethane	1062 nm	O	
	Metal	Coated metals	1062 nm	+
		Metals	1062 nm	+
	Organic material	Fruits and vegetables	1062 nm	-
Paper	Paper	1062 nm	O	
Textile	Textile	1062 nm	-	
Label	Label	1062 nm	+	

+ = good
 0 = potential
 - = bad

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Application examples

SPA-FP; PULSED – laser (for metals and plastics)



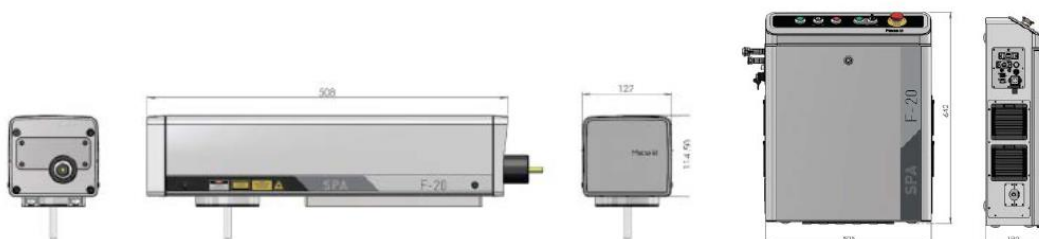
SPA-FF; FILM – Laser (für Folien und beschichtete Verpackungen)



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SPA-FP 20W

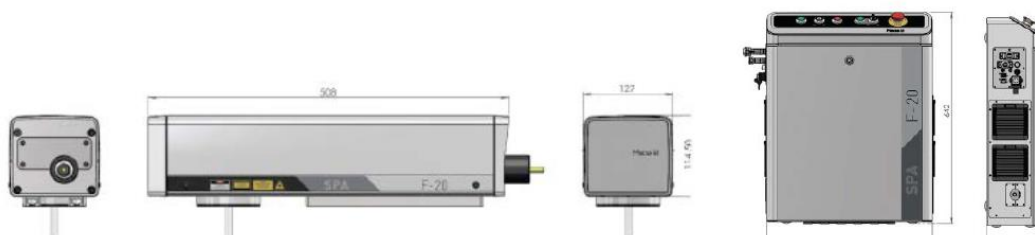
Model	SPA-FP			
Name	LASER_SPA-FP-S20-AP90-ED5		LASER_SPA-FP-S20-AP90-MD5	
Material number	1040.4885		1040.6615	
Shutter	Electronic		Electromechanical	
Performance	20 W			
Pulse duration	100 ns			
Pulse performance	9,4 kW			
Pulse energy	1 mJ			
Frequency	20-200 kHz			
Connection values	115 V / 230 V ; 50 Hz / 60 Hz ; 500 VA			
Wavelength	1062nm			
Performance level	PL-D			
Beam path	90°			
Dimensions (A x B x C)	Head: 127 x 114,5 x 508 mm; control unit: 182 x 642 x 505 mm			
Weight	Head: 6 kg; control unit: 22 kg			
Protection class	IP 54			
Assembly	Laser, scanner and scanner control are integrated in the laser head, control electronics and energy supply are integrated in the control unit.			
Environment	Temperature + 15° to + 40° C, relative humidity max. 95 %			
Cooling system	Integrated air cooling			
Control	PC-software, touchscreen terminal			
Interfaces	Ethernet TCP/IP, I/O, USB (RS 232 need adaptor)			
Operating system	ScanLinux V5.2.7			
Speed (1-line)	250 m/min (coding speed can differ depending on size, content and material)			
Lens	Mat. no.	Working space	Working distance	Beam diameter
	1040.6607	55x55 mm	128 mm	16 µm
	1040.6608	100x100 mm	205 mm	26 µm
	1040.6609	168x168 mm	347 mm	41 µm
	1040.6610	212x212 mm	458 mm	56 µm
	1040.6611	242x242 mm	554 mm	68 µm
	1040.6613	560x560 mm	889 mm	132 µm
Pilot laser	1040.6034	Pilot laser		
Plug	1040.4887	I/O plug DB 44		
	1040.4888	Signal plug photo cell I/ 3-pin M8		
Mounting rail	1040.4918	Mounting rails F		
Software	1008.3223	Software Marca V5.6.9.a and higher		
	1000.0385	Bar code license		
Accessories	for details see data sheet accessories and extraction			



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SPA-FP 50W

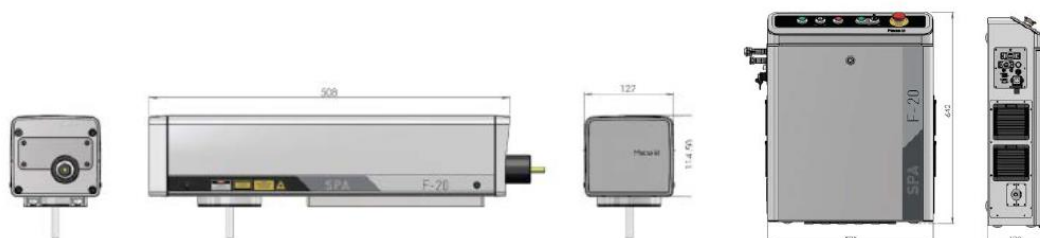
Model	SPA-FP			
Name	LASER_SPA-FP-U50-AP90-ED5		LASER_SPA-FP-U50-AP90-MD5	
Material number	1040.6352		1040.6617	
Shutter	Electronic		Electromechanical	
Performance	50 W			
Pulse duration	120 ns			
Pulse performance	7,83 kW			
Pulse energy	1mJ			
Frequency	50-200 kHz			
Connection values	115 V / 230 V ; 50 Hz / 60 Hz ; 700 VA			
Wavelength	1062nm			
Performance level	PL-D			
Beam path	90°			
Dimensions (A x B x C)	Head: 127 x 114,5 x 508 mm; control unit: 182 x 642 x 505 mm			
Weight	Head: 6 kg; control unit: 22 kg			
Protection class	IP 54			
Assembly	Laser, scanner and scanner control are integrated in the laser head, control electronics and energy supply are integrated in the control unit.			
Environment	Temperature + 15° to + 40° C, relative humidity max. 95 %			
Cooling system	Integrated air cooling			
Control	PC-software, touchscreen terminal			
Interfaces	Ethernet TCP/IP, I/O, USB (RS 232 need adaptor)			
Operating system	ScanLinux V5.2.7			
Speed (1-line)	250 m/min (coding speed can differ depending on size, content and material)			
Lens	Mat. no.	Working space	Working distance	Beam diameter
	1040.6607	55x55 mm	128 mm	27 µm
	1040.6608	100x100 mm	205 mm	44 µm
	1040.6609	168x168 mm	347 mm	69 µm
	1040.6610	212x212 mm	458 mm	94 µm
Pilot laser	1040.6034	Pilot laser		
Plug	1040.4887	I/O plug DB 44		
	1040.4888	Signal plug photo cell I/ 3-pin M8		
Mounting rail	1040.4918	Mounting rails F		
Software	1008.3223	Software Marca V5.6.9.a and higher		
	1000.0385	Bar code license		
Accessories	for details see data sheet accessories and extraction			



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SPA-FF 20W

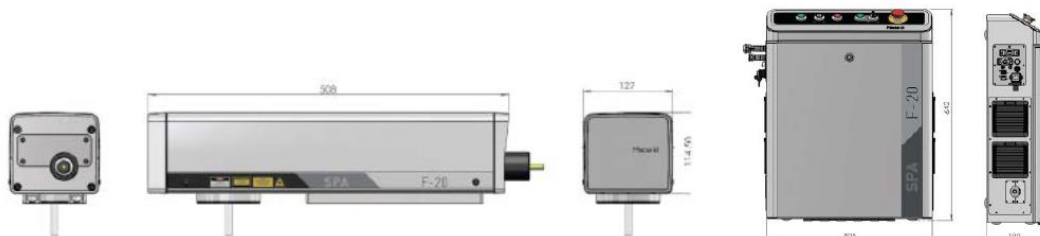
Model	SPA-FF			
Name	LASER_SPA-FF-U20-AF90-ED5		LASER_SPA-FF-U50-AF90-ED5	
Material number	1040.6349		1040.6619	
Shutter	Electronic		Electromechanical	
Performance	20 W			
Connection values	115 V / 230 V ; 50 Hz / 60 Hz ; 450 VA			
Wavelength	1062nm			
Performance Level	PL-D			
Beam path	90°			
Dimensions (A x B x C)	Head: 127 x 114,5 x 508 mm ; control unit: 182 x 642 x 505 mm			
Weight	Head: 6 kg; control unit: 22 kg			
Protection class	IP 54			
Assembly	Laser, scanner and scanner control are integrated in the laser head, control electronics and energy supply are integrated in the control unit.			
Environment	Temperature + 15° to + 40° C, relative humidity max. 95 %			
Cooling system	Integrated air cooling			
Control	PC-software, touchscreen terminal			
Interfaces	Ethernet TCP/IP, I/O, USB (RS 232 need adaptor)			
Operating system	ScanLinux V5.2.7			
Speed (1-line)	850 m/min (coding speed can differ depending on size, content and material)			
Lens	Mat. no.	Working space	Working distance	Beam diameter
	1040.6607	55x55 mm	128 mm	27 µm
	1040.6608	100x100 mm	205 mm	44 µm
	1040.6609	168x168 mm	347 mm	69 µm
	1040.6610	212x212 mm	458 mm	94 µm
Pilot laser	1040.6034	Pilot laser		
Plug	1040.4887	I/O plug DB 44		
	1040.4888	Signal plug photo cell I/ 3-pin M8		
Mounting rails	1040.4918	Mounting rails F		
Software	1008.3223	Software Marca V5.6.9.a and higher		
	1000.0385	Bar code license		
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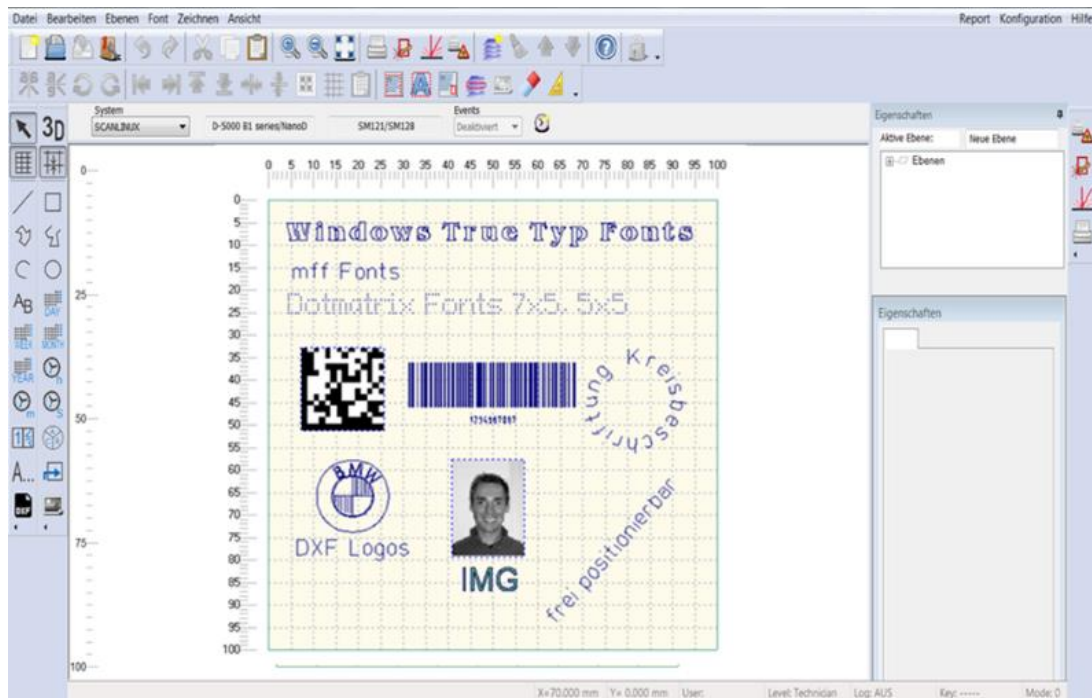
SPA-FF 50W

Model	SPA-FF			
Name	LASER_SPA-FF-U50-AF90-ED5		LASER_SPA-FF-U50-AF90-MD5	
Material number	1040.6353		1040.6621	
Shutter	Electronic		Electromechanical	
Performance	50 W			
Connection values	115 V / 230 V ; 50 Hz / 60 Hz ; 650 VA			
Wavelength	1062nm			
Performance Level	PL-D			
Beam path	90°			
Dimensions (A x B x C)	Head: 127 x 114,5 x 508 mm ; control unit: 182 x 642 x 505 mm			
Weight	Head: 6 kg; control unit: 22 kg			
Protection class	IP 54			
Assembly	Laser, scanner and scanner control are integrated in the laser head, control electronics and energy supply are integrated in the control unit.			
Environment	Temperature + 15° to + 40° C, relative humidity max. 95 %			
Cooling system	Integrated air cooling			
Control	PC-software, touchscreen terminal			
Interfaces	Ethernet TCP/IP, I/O, USB (RS 232 need adaptor)			
Operating system	ScanLinux V5.2.7			
Speed (1-line)	850 m/min (coding speed can differ depending on size, content and material)			
Lens	Mat. no.	Working space	Working distance	Beam diameter
	1040.6607	55x55 mm	128 mm	27 µm
	1040.6608	100x100 mm	205 mm	44 µm
	1040.6609	168x168 mm	347 mm	69 µm
	1040.6610	212x212 mm	458 mm	94 µm
Pilot laser	1040.6034	Pilot laser		
Plug	1040.4887	I/O plug DB 44		
	1040.4888	Signal plug photo cell I/ 3-pin M8		
Mounting rails	1040.4918	Mounting rails F		
Software	1008.3223	Software Marca V5.6.9.a and higher		
	1000.0385	Bar code license		
Accessories	for details see data sheet accessories and extraction			



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Software



- Marca PC software with windows interface (7, 8, 10)
- WYSIWYG display
- Freely selectable character size and alignment
- Variable date and time formats
- Serial numbering or text passages
- Text list
- Circular marking
- Logos or graphics loaded in DXF or IMG format
- Bar codes, 2D codes
- True Type Fonts, Unicode, MFF Fonts, Crystal Fonts 5x5, 7x5
- Database printing
- Logos and graphics can be created via integrated vector graphic function
- Font Editor
- Multilayer function
- Event handler
- And much more

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Order code

		LASER	-	SPA-FP	-	S	20	-	AP	90	-	E	D	5
Typ														
LASER	Lasert													
Model														
SPA-FP	Faser Pulsed													
SPA-FF	Faser Film													
Option														
S	Standard (nur 20W Pulsed)													
U	UHS													
Leistung														
20	20 Watt													
50	50 Watt													
Wellenlänge														
AP	1064 nm pulsed													
AF	1064 nm film													
Strahlaustritt														
90	90°													
Shutter														
E	Electronic													
M	Electromechanic													
Performance Level														
D	PL-D													
Schutzart														
5	IP 54													

Quality

ISO-certification by DIN EN ISO 9001-2015

Made in Europe.

Our quality requirements include the process of continuous improvement. Design and technical changes are reserved without previous announcement.

Contact

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