



Ultra automatic. Ultra fast. Ultra-Light.

The new Ultra-Light Plus cabinet offers more room for marking and more comfort.

The door closes automatically after starting the marking the process. And after the marking the door opens again. Due to its large marking area, the pneumatic door and the large viewing window it is possible to mark fast, precise and with just little effort.



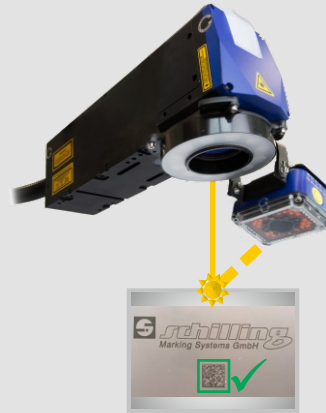
The scope of delivery of the Ultra-Light Plus Series includes a laser source (diode laser V40, V80, fiber laser F20, M20, F50 and uv-laser Uv3), a laser safety cabinet of laser class 1 with pneumatic door opening and closing, a large perforated plate, an embedded PC with marking software and an automatic x- and z-axis. Moreover all Ultra-Light marking lasers include a high-quality extraction system.





HIGHLIGHTS

- * Integrated extraction system
- * Automatic door opening and closing
- * Compact dimensions with large marking area
- * Automatic x- and z-axis
- * Very silent operation
- * Complete packages with embedded PC and marking software



APPLICATIONS

Automotive Industry

- * High contrast markings
- * Fast laser markings of codes for traceability
- * Easy automation possibilities

Aerospace Industry

- * High-contrast laser markings
- * Very fast coding and marking
- * Safe traceability

Packaging Industry

- * Marking and Reading of codes
- * Connection to data base systems
- * Flexible markings of dates, codes, continuous numbering

Medical and Pharmaceutical

- * Clean direct part markings
- * Fast and permanent direct part markings
- * No consumables necessary
- * No changes on the surface that can have an impact on the functionality of the parts



ULTRA-LIGHT PLUS

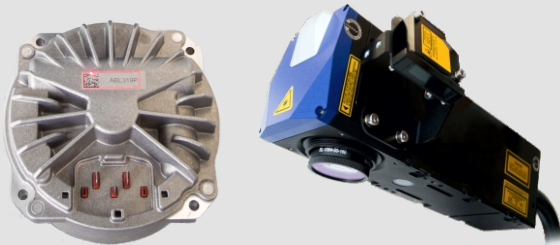


LASER MODEL	Ultra-Light V40+	Ultra-Light V80+	Ultra-Light UV3+	Ultra-Light F10+	Ultra-Light F20+	Ultra-Light F50+	Ultra-Light M20+
Article Number	111.0042PU	113.0082PU	120.0004PU	122.1F10PU	123.1F20PU	125.1F50PU	123.1M20PU
Laser source	Nd:YVO4 (Vanadat)		UV-Laser	Fiber laser			Short pulse fiber laser
Wavelength	1064 nm		355 nm	1060-1080 nm			1050-1080 nm
Nominal power	10W	20W	3W	10W	20W	50W	20W
Repetition rate range	10-100kHz	20-100kHz	20-80kHz	20-200kHz			20-500kHz
Pulse width	100 ns						Einstellbar 4 - 250 ns
Warranty	24 months on a new laser system						
Aiming & focus beam	Semiconductor laser (red) to display the size and position of marking job, second red pointer for focusing						
Marking capabilities	Static, On the Rotary, On the fly (in motion), Extended Layer on X-Y-Axes						
Fiber length	3 m						
Interfaces	Ethernet, RS-232, USB			6xUSB, 3x Ethernet, 1x RS-232, Digital I/O			
Power supply	24-28VDC			100-240VAC			
Power consumption	450W			250W			
Cooling system	Integrated air cooling						
	Objective different focal lengths (mm)						
Objective F-Theta	160L			254S			
Working distance	175±4			290±2			
Marking area	470x120			490x140			
Max. marking area	530x180						
	Overall dimensions (mm)						
Rack 19" with embedded PC	430x370x111			427x435x111			
Marking head	110x122x158			89x311x96			
Laser safety cabinet	1550x1025x2068						
Max. part size	535x645x340 mm (lengthways) / 745x470x340 mm (crossways)						
	Approx. weight (kg)						
Rack 19"	12			16			
Marking head	3,8			2			
Laser safety cabinet	185						
	Protection class						
Rack 19"	IP20			IP 21			
Marking head	IP 54			IP64			
Laser safety cabinet	Laser safety class 1						
	Environment						
Operating temperature	Min. 15°C (59°F) / Max. 35°C (95°F)			Min. 5°C (41°F) / Max. 42°C (108°F)			
Humidity	< 70 %			< 90 %		< 80 %	
Operating altitude	< 2000 m						
Vibrations	Not permitted						
Max. acceleration	0,5 G						
Nois	< 70 dB						
Storage temperature	Min. -5°C (23°F) / Max. 55°C (131°F)			Min. -10°C (14°F) / Max. +60°C (140°F)			
Conformance to EU Machinery Directives	2006/42/EG Machinery Directive 2014/30/EU Electromagnetic Radiation 2014/35/EU Low Voltage Directive						
Conformance to EU Standards	EN 60825-1:2015-07 Safety of Laser Systems EN ISO 13849-1:2011-03 Safety of Machinery EN ISO 12100:2011-03 Safety of Machinery EN 61000-6-4:2011-09 Electromagnetic Compatibility						
NOTE:	Specifications are subject to change without notice						



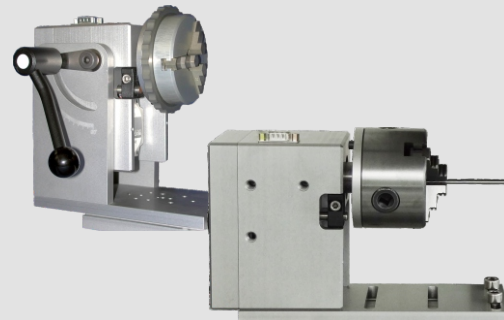
Focus Finder

- * Automatic focusing
- * Mounting directly on laser head



Rotary axes

- * Laser markings on 360°
- * Easy and fast retrofitting



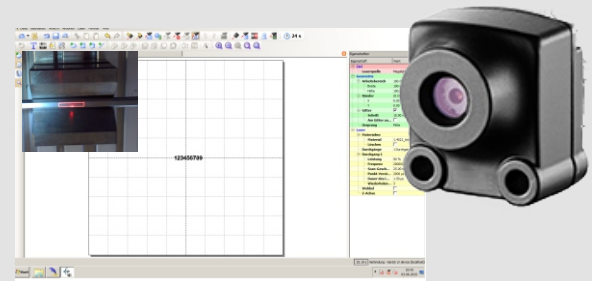
Hand scanners

- * Fast reading of codes
- * Wireless hand scanners available
- * Integrated illumination



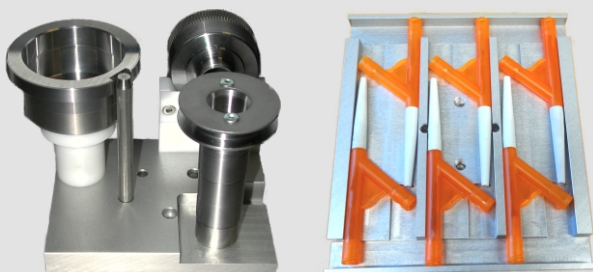
Camera

- * Live position displaying
- * Perfect for positioning on high parts



Fixtures

- * Increase in process reliability
- * Optionally available with RFID technology



Code inspection system VISION

- * Mark, Read and recording of marked codes
- * With grading function

