

Laser Marker Selection Guide

LARGE SELECTION

LASER MARKER

FAYb LASER MARKER



LP-M/MA SERIES



LP-Z SERIES



LP-S/SW SERIES



LP-RF SERIES



LP-V/W SERIES

CO₂ LASER MARKER



LP-RC SERIES



LP-400 SERIES



LP-GS SERIES



LP-300 SERIES

Laser wavelength 380 400 500 Visible region 600 1,000 FAYb Laser 1,060 nm 1,064 nm 1,070 nm Infrared region

FAYb LASER MARKER

High-power Output and 3D-control Laser Marker

LP-M/MA SERIES





This high-end model features a head with an IP64 rating and is capable of 3D marking.

The laser interception mechanism and interlock are redundantly equipped.

This model realizes high productivity and safety *The LP-MA series is introduced to only lin

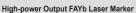


3D-Control FAYb Laser Marker

LP-Z SERIES



This all-round laser marker features 3D marking capability and wide 300 x 300 mm (11.811 x 11.811 in) marking area.



LP-S/SW SERIES





The head features an IP67G rating.

This model can be used for a marking operation under a harsh condition such as an environment

The head is removable



FAYb Laser Marker

LP-RF SERIES













Reliable hard design such as high noise resistance controller and IP64 rating head. Simple and easy



High-definition Laser Marker





This short pulse laser marker is suitable for high contrast marking on resin surfaces. (LP-V series) Equipped with a CW oscillator, this model is ideal for applications such as semiconductor package production. (LP-W series)

CO₂ LASER MARKER



High-performance Laser Marker

I_P-400 SERIES



Performance, functionality, quality, operability. The high-grade LP-400 CO₂ laser marker delivers, meeting needs ranging from marking to processing.



Compact CO₂ Laser Marker

P-GS SERIES





Minimized head size contributes to floor space c ost reduction. Corresponding to the small size characters and 2D code.



High-speed Marking Type CO₂ Laser Marker

SERIES



Shorter marking times with speeds 1.4 times faster than before. Corresponding to the high-speed line



Entry-Level Model CO2 Laser Marker LP-300 SERIES





Entry-level model for laser marking Cost-effective lasar marker

10.000

CO₂ Laser

9,300 nm 10,600 nm

Laser Marking Applications

FAYb Laser Marker













Medical instruments



Battery housing











Molded resin part



Molded resin part

CO₂ Laser Marker







Outer box(GS1datamatrix)





Laser label (marking + half-cut)



Ceramic capacitors



Connector





Nameplate







Retortable pouches

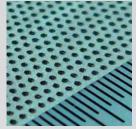


Laser Processing Applications

FAYb Laser Marker



Processing of bearing surface



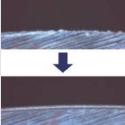
Depression processing on meta



Removal of coating film from gasket



Engraving on die



Deburring of metal parts



Removal of gold plating from electronic parts

CO₂ Laser Marker



Film cutting



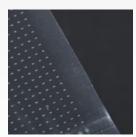
Resin gate cut



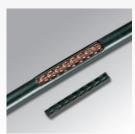
Removal of ribbon cable insulation



Rubber gaskets cutting

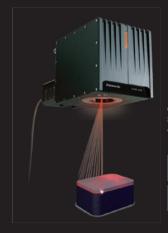


Film driling



Insulation removal

Laser Plastic Welding



Galvano Scanning System
Scanning Laser Processing Machine

/L-W1 SERIES





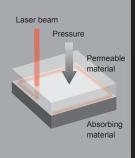


ト 7 ト 7 200 400 ヒ ソ ヒ ソ

* The VL-W1 series is introduced to only limited countries.

What is laser Welding?

Laser welding is a bonding method that uses a laser beam to generate heat between adherends. For laser welding, a transparent resin (permeable material) and light absorbing resin (absorbing material) must be combined. Generally, to achieve a secure bond, pressure between the materials is required when lasing.



Plastic Welding Applications



Safty light curtain: Case and front panel



Sensor: Case and Window for communication signals



Automotive sensor: Welding case



Microfluidic device: Welding flow path



ECU: Welding cover



Display: Welding water proof panel

Material compatibility chart

lacktriangle =Good \bigcirc =Usable \triangle =Incompatible \times =Non-usable

Material		FAYb laser marker	CO ₂ laser marker	■ FAYb laser marker	
		LP-M series LP-Z series LP-S series LP-V series LP-RF series	LP-RC series LP-GS series LP-400 series LP-300 series	ABC	ABC
Metal	Iron	•	×	u.	
	Carbon steel	•	×	Stainless steel (SUS)	Steel
	Alloy steel	•	×	ABC	ABC
	Copper, brass	•	×		
	Aluminum alloys	•	×		
	Magnesium alloys	•	×	Copper	Aluminum
	Titanium alloys	•	×	Suppose and the suppose and th	
	Nickel alloys	•	×	ABC	ABC
	Gold, silver	0	×		
Resin	ABS (Acrylonitrile butadiene styrene)	•	•	DO (M/I-it-)	DO (DIII)
	EP (Epoxy)	•	•	PC (White)	PC (Black)
	PA (Polyamide / nylon)	•	0	ABC B	1540
	PBT (Polybutylene terephthalate)	•	0		ABC
	PC (Polycarbonate)	•	0	- Carlotte Control of the Control of	
	PE (Polyethylene)	0	0	PMMA (Transparent)	PP (Black)
	PET (Polyethylene terephthalate)	0	•	ABC ABC	100
	PF (Phenol)	•	•		ABC
	PMMA (Acrylic)	•	0		
	POM (Polyacetal)	•	0	PS (Black)	PS (White)
	PP (Polypropylene)	•	0		
	PS (Polystyrene)	•	0	CO ₂ laser marker	
	PU (Polyurethane)	•	0	ABC	АВС
	PVC (Polyvinyl chloride)	0	•		
	UF (Urea)	•	•		
Others	Silicone resin	0	0	PVC (White)	Glass epoxy
	Ceramics	0	0		Application of the second
	Wood	Δ	•	ABC ABC	ABC
	Paper	Δ	•	ME ADC	
	Glass	×	•	Epoxy	Glass
	Rubber	•	•	Lpoxy Glass	

* The above shows typical judgment results. Judgment results may differ when used on customers' workpieces.

Laser marker installation process flow

Consultation



We suggest the best model based on your requirements.

Testing and reporting of test results



We report the test results by providing a test marking report and marked samples after testing with the actual laser marker.

Demonstration using actual equipment



We provide a demonstration to check that the marking quality and operation are in accordance with your request.

Discussion with the customer



We hold a meeting to discuss integration specifications and the communication between the laser marker and PLC.

Attendance during commissioning, explanation of operating procedures



In accordance with your request, we provide support to install machines and operate laser markers.

After-sales service



In accordance with your request, we offer on-site maintenance service and appropriate inspection service after your unit is swapped with a replacement unit.

^{*} We can check marking results using actual workpieces provided by your company. For details, please contact our sales office nearest you.

Precautions for Proper Use

Laser safety

- This product is classified as a Class 4 Laser Product in IEC/JIS/FDA regulations 21 CFR 1040.10 and 1040.11. Never look at or touch the direct laser beam and its reflection.
- · Handle the product according to the instruction given on the warning labels.(Warning labels are not shown in the product photographs in this catalog.)
- The laser used by this product generates infrared light that is invisible to the human eye. Use particular caution when the laser is operating.

Maintenance

- Air filter: Regularly clean the air filter attached to the Laser Marker to maintain cooling effects.
- Laser pointer emission port: Dust or chips adhering to the laser pointer emission port may affect the printing quality or seriously damage the laser marker. Clean the laser pointer emission port regularly.

Recommended use of a dust collector

- Depending on the object being marked, harmful gasses or smoke that have a detrimental effect on the human body or the laser marker may be generating during marking. If your application falls under this description, use a dust collector.
- *For more information, contact your sales representative.

Disclaimer

The applications described in the catalog are all intended for examples only. The purchase of our products described in the catalog shall not be regarded as granting of a license to use our products in the described applications. We do NOT warrant that we have obtained some intellectual properties, such as patent rights, with respect to such applications, or that the described applications may not infringe any intellectual property rights, such as patent rights, of a third party.

Please contact:

Panasonic Industrial Devices SUNX Co., Ltd.

2431-1 Ushiyama-cho, Kasugai-shi, Aichi, 486-0901, Japan Global Sales Department ■Telephone: +81-568-33-7861 ■Facsimile: +81-568-33-8591

panasonic.net/id/pidsx/global



All Rights Reserved ©Panasonic Industrial Devices SUNX Co., Ltd. 2018