

Laser Types & Modules

Type	Power	LDM	LPM		
			Dual Mode	Standard	Flex
CO ₂ (standard)	40 W	LDM40	LPM ^{dm} 40	LPM40	LPM ^{flex} 40
	100 W	LDM100	LPM ^{dm} 100	LPM100	LPM ^{flex} 100
	300 W	LDM300	LPM ^{dm} 300	LPM300	LPM ^{flex} 300
	400 W			LPM400	LPM ^{flex} 400
	1000 W			LPM1000	LPM ^{flex} 1000
Fiber (f)	40 W	LDM40 ^f	LPM ^{dm} 40 ^f	LPM40 ^f	
	100 W	LDM100 ^f	LPM ^{dm} 100 ^f	LPM100 ^f	
Ultraviolet (uv)	10 W		LPM ^{dm} 10 ^{uv}		
	20 W		LPM ^{dm} 20 ^{uv}		

***LaserSharp**® Systems are capable of combining two or more different laser types in one station for the utmost processing flexibility and productivity.

LASERSHARP® MODULES

- **LDM:** The **LaserSharp**® Laser Down-web Module (LDM) is designed for straight-line or down-web laser slitting or scoring of roll-fed materials such as flexible films and aluminum foil.
- **LPM:** The **LaserSharp**® Laser Processing Module (LPM) offers all of the advantages of the LDM, but will additionally cut, score, etch, perforate and ablate any pattern or shape into the material. The LPM is available as a standard module or in the following options:
 - *The LPM Dual Mode* incorporates two interchangeable modes capable of high-speed processing in either the down-web direction or small patterns less than 170 mm in size.
 - *The LPM Flex Series* increases processing options with the ability to automatically adjust the processing area of view between two different sizes ranging from 140 x 140 mm to 600 x 600 mm.
 - *The GT option* uses optimized beam steering motors with lighter mirrors, resulting in faster processing speeds. The GT option can be applied to any LPM.

CO₂ (STANDARD)

- Most common laser used in **LaserSharp**® systems to through cut, kiss-cut, score, etch, or perforate substrates.
- Available in 9.4, 10.25, and 10.6 micron laser wavelengths.
- Best suited for processing non-metallic materials such as plastics, papers, polymers, textiles, foams, and adhesives.
- Common applications include:
 - Commercial print: greeting cards, folding cartons, brochures, business cards, stencils, and labels
 - Flexible packaging: easy-open and breathable packaging features
 - Industrial: gaskets and adhesive spacers
 - Medical: adhesive and plastic materials for medical components
- Typical power output range: 40-1000 Watts

FIBER (F)

- Ideally suited for the ablation of thick, conductive coatings that would typically slow a UV laser. Also capable of metal and plastic welding.
- Available in 1070 nanometer laser wavelength.
- Common applications include ablating, cutting, and welding materials used in the electronic and medical markets.
- Available in pulsed or continuous wave laser energy outputs.
- Typical power output range: 20-100 Watts

ULTRAVIOLET (UV)

- Suitable for the fine ablation of very thin (<1 μm) conductive coatings or thin nonconductive coatings, which would otherwise be transparent to other laser wavelengths.
- Available in 355 nanometer laser wavelength.
- Common applications include ablating and cutting electronic components, biosensors, and precise electrode patterns.
- Typical power output range: 10-20 Watts



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Laser Modules

LPM



LDM



GT



Integration Examples

