



Motorized laser power attenuators LPA

Main features

- Robust design
- Compatible with high optical powers
- Adjustable polarizer angle ± 2 deg
- Large clear aperture
- External controller included
- User-friendly software
- 175,543 steps in full rotation
- $\pm 0,05$ % laser power accuracy
- Fast adjustment time

Application examples

- Laser machining
- Research
- Laser power control and attenuation

Laser power attenuator LPA is a compact motorized device for laser power control. The LPA is produced in the UV, visible and NIR spectral ranges, from 250 nm to 2000 nm. This device is combined with the unique mechanical design which ensures repeatability and high stability of performance. All optical components of the LPA are made for high LIDT and provide a stable and reliable performance even when using them with high power lasers in industrial applications. A secondary laser beam from the laser power attenuator unit can be rejected to an external beam dump. The beam dump is used for avoiding any thermal effects or stress in the housing of the LPA device.

Standard specifications

MOTORIZED LASER POWER ATTENUATOR SPECIFICATIONS	
Input and output clear aperture	18 mm
Dimensions (H x W x L)	58 x 36 x 74,5 mm 58 x 51,5 x 74,5 mm with beam dump
Control interface	USB and RS232
Controller	External

*Custom design available

Standard products

ITEM MODEL	ATTENUATION RANGE	LIDT	WAVELENGTH	SKU
LPA	0,5 - 95 %	2 J/cm ² (10 ns @ 266 nm)	257 nm	9326
			266 nm	9327
	0,2 - 96 %	3 J/cm ² (10 ns @ 355nm)	343 nm	9264
			355 nm	9263
	0,1 - 98 %	5 J/cm ² (10 ns @ 532 nm)	515 nm	9262
			532 nm	9260
		10 J/cm ² (10 ns @ 1064 nm)	1030 nm	9259
			1064 nm	9258

Accessories for laser power attenuators LPA

RECOMMENDED ACCESSORY	FOR BEAM HEIGHT OF	SKU
Post mounting set	50 mm or 76 mm (2" or 3")	9343
Post mounting set	73 - 125 mm (2,9" - 5")	9344
Dedicated beam dump <6W with coated protective window		9345
Separated beam dump <30W		10141
Separated beam dump <60W		35434
RS232 cable 1,8 m		29317
RS232 cable 5 m		29318
RS232 cable 10 m		29319
DIN35 rail adapter		16919



Advanced motorized laser power attenuators LPA-A

Main features

- Integrated controller
- Absolute encoder - no homing required
- High accuracy - $\pm 0,004$ deg (less than $\pm 0,01$ % of laser power)
- Resolution - 0,002 deg, 7,4 arcsec, 0,035 mrad
- Fast adjustment - less than 0,2 sec (min to max)
- High damage threshold: up to 10 J/cm^2 (10 ns @ 1064 nm)
- Adjustable polarizer angle

Application examples

- Precise laser micromachining
- Laser power control and attenuation
- Research

Advanced laser power attenuator LPA-A is a compact motorized device for laser power control with an integrated controller and absolute encoder. The LPA-A is produced in the UV, visible and NIR spectral ranges, from 250 nm to 2000 nm. This device is combined with the unique mechanical design which ensures repeatability and high stability of performance. All optical components of the LPA-A are made for high LIDT and provide a stable and reliable performance even when using them with high power lasers in industrial applications. A secondary laser beam from the laser power attenuator unit can be rejected to an external beam dump. The beam dump is used for avoiding any thermal effects or stress in the housing of the LPA-A device.

Standard specifications

ADVANCED VARIABLE MOTORIZED LASER POWER ATTENUATOR SPECIFICATIONS

Input and output clear aperture	15 mm
Controller	Integrated
Dimensions (H x W x L)	86 x 47 x 58 mm
Control interface	USB or RS232

Standard products

ITEM MODEL	ATTENUATION RANGE	LIDT	WAVELENGTH	SKU
LPA-Av2	0,5 - 95 %	2 J/cm ² (10 ns @ 266 nm)	257 nm	11809
			266 nm	11810
		5 J/cm ² (10 ns @ 532 nm)	515-1030 nm	14898
	0,2 - 96 %	3 J/cm ² (10 ns @ 355nm)	343 nm	11808
			355 nm	11805
			515 nm	11807
	0,1 - 98 %	5 J/cm ² (10 ns @ 532 nm)	532 nm	11806
			1030 nm	11804
		10 J/cm ² (10 ns @ 1064 nm)	1064 nm	11708

Accessories for laser power attenuators LPA-A

MOUNTING OPTION	FOR BEAM HEIGHT OF	SKU
Post mounting set	76,2 - 100 mm (3" - 4")	9346
Post mounting set	57 - 65 mm (2,2" - 2,6")	9347
Dedicated beam dump with protective window	-	9345
Separated beam dump <30W		10141
Separated beam dump <60W		35434
RS232 cable 1,8 m		29317
RS232 cable 5 m		29318
RS232 cable 10 m		29319
DIN35 rail adapter		16919

**PHOTO
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