

Motorized polarization rotator MRO



Rotator (MRO) is a compact motorized device for laser polarization control. The MRO is produced in the UV, visible and NIR spectral ranges, from 250 nm to 2000 nm. The device has external controller.

All optical components of the MRO are made for high LIDT and provide stable and reliable performance even using them with high power lasers in industrial applications.

Main features

- Compact design
- High resolution - 175543 μ steps in 360 deg rotation
- High accuracy - ± 10 μ steps accuracy ($\pm 0,02$ deg)
- Clear aperture - 18 mm
- Fast adjustment - less than 0,2 sec [0 to 45 deg]

Standard specifications

SPECIFICATIONS	
Clear aperture	$\varnothing$ 18 mm
Standard wavelengths	257 nm; 343 nm; 355 nm; 400 nm; 515 nm; 523 nm; 800 nm; 1030 nm; 1064 nm
LIDT coating	>10 [J/cm ²] [10 ns @ 1064 nm]
Close to open time [0 to 45 deg]	$< 0,2$ sec
Resolution	175,543 μ steps in full rotation 21,943 μ steps in 45deg rotation [0,002 deg, 7,2 arcsec, 0,035 mrad]
Accuracy	± 10 μ steps [$\pm 0,02$ deg]
Motor	2 phase stepper motor, 200 steps with 256 μ stepping
Mechanical dimensions	37,5 x 36 x 58 mm
Controller mechanical dimensions	125 x 53 x 31 mm
Software	LPA software

Standard products

CLEAR APERTURE	CONTROL INTERFACE	WAVEPLATE	RETARDATION	LIDT	SKU	PRICE
18 mm	USB or RS232	1064 nm	L/2	10 J/cm ² [10 ns@1064 nm]	19706	1090 €
		1030 nm	L/2	10 J/cm ² [10 ns@1030 nm]	19572	1090 €
		532 nm	L/2	5 J/cm ² [10 ns@532 nm]	19705	1090 €
		515 nm	L/2	5 J/cm ² [10 ns@515 nm]	19700	1090 €
		355 nm	L/2	3 J/cm ² [10 ns@355 nm]	19702	1130 €
		343 nm	L/2	3 J/cm ² [10 ns@343 nm]	19701	1130 €
		266 nm	L/2	2 J/cm ² [10 ns@266 nm]	19703	1130 €
		257nm	L/2	2 J/cm ² [10 ns@257 nm]	19704	1130 €
		1064 nm	L/4	10 J/cm ² [10 ns@1064 nm]	19708	1090 €
		1030 nm	L/4	10 J/cm ² [10 ns@1030 nm]	19479	1090 €
		532 nm	L/4	5 J/cm ² [10 ns@532 nm]	19709	1090 €
		515 nm	L/4	5 J/cm ² [10 ns@515 nm]	19478	1090 €
		355 nm	L/4	3 J/cm ² [10 ns@355 nm]	13527	1130 €
		343 nm	L/4	3 J/cm ² [10 ns@343 nm]	19477	1130 €
		266 nm	L/4	2 J/cm ² [10 ns@266 nm]	19711	1130 €
		257nm	L/4	2 J/cm ² [10 ns@257 nm]	19710	1130 €
		without optics	None	None	19707	990 €