Fixed ratio beam expanders FEX

Main features

- Divergence adjustment
- Galilean optical design
- UVFS optical elements
- Grease free mechanical design
- Wide wavelength adoption - 200 nm to 2 µm

Application examples

- Laser material processing
- Medical
- Research

Fixed ratio beam expanders FEX series are used to increase the laser beam diameter. The FEX model diversity covers the UV, visible and NIR spectral ranges. These compact beam expanders are designed for required wavelength and have divergence adjustability. All optical elements of beam expanders are made of fused silica with high LIDT coatings and provide a stable and reliable performance even using them with high power lasers.

Standard specifications

FIXED RATIO BEAM EXPANDER SPECIFICATIONS	
Clear output aperture	23 mm
Divergence	Adjustable
Outer Diameter	30 mm
Mounting options	SM1 (male, female), ø30 mm
Transmission	>98%
LIDT	3 J/cm² (10 ns @ 355nm) 5 J/cm² (10 ns @ 532 nm) 10 J/cm² (10 ns @ 1064 nm)

*Custom design available

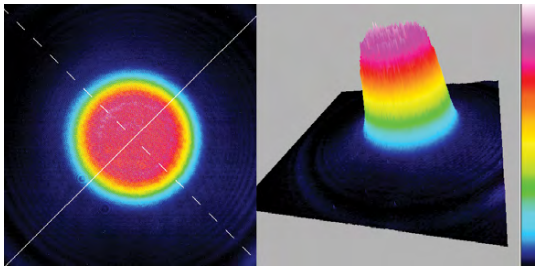
Standard products

ITEM MODEL	EXPANSION	CLEAR INPUT APERTURE	RECOMMENDED MAX. INPUT BEAM SIZE, 1/E²	CLEAR OUTPUT APERTURE	MECHANICAL LENGTH	WAVELENGTH	SKU
FEX-2	2 x	11,5 mm	ø7 mm	23 mm	65 mm	343-355 nm	7723
						515-532 nm	7725
						1030-1064 nm	7727
						1030-1064 + 515-532 nm	11169
FEX-3	3 x	11,5 mm	ø5,3 mm	23 mm	65 mm	343-355 nm	7733
						515-532 nm	7731
						1030-1064 nm	7729
						1030-1064 + 515-532 nm	11170
FEX-4	4 x	11,5 mm	ø4 mm	23 mm	90 mm	343-355 nm	7735
						515-532 nm	7737
						1030-1064 nm	7739
						1030-1064 + 515-532 nm	11171
FEX-5	5 x	11,5 mm	ø3,2 mm	23 mm	95 mm	343-355 nm	7741
						515-532 nm	7743
						1030-1064 nm	7746
						1030-1064 + 515-532 nm	11172
FEX-8	8 x	7 mm	ø2 mm	23 mm	104 mm	343-355 nm	7749
						515-532 nm	7752
						1030-1064 nm	7754
						1030-1064 + 515-532 nm	11173

Adapter options for fixed beam expanders FEX

RECOMMENDED ACCESSORY	FOR BEAM HEIGHT OF	SKU
Adapter SM1 male to M30 X 1 male	-	9338
Adapter SM1 female to C-mount	-	9339
Adapter SM1 female to M30 X 1 male	-	9340

Flat top converter FTC



Main features

- Quick change between Gaussian and Flat-top beam
- The beam profile remains Flat-Top shape along optical axis
- Integrated controller
- Designed according your laser specs.
- Clear aperture up to 15 mm
- Quick switching time - 0.2 sec
- High damage threshold up to 10J/cm^2 (10 ns @ 1064 nm)
- Conversion efficiency up to 70% (while on Flat-Top mode)

Application examples

- Precise laser micromachining
- Life sciences
- Research

Flat top converter unit is “all in one” motorized solution for a Gaussian beam transformation to a Flat-Top (Top Hat) beam. The beam profile remains Flat-Top shape along optical axis. The device consists of quartz wave-plate, space-variant wave-plate and a high contrast polarizer. The FTC is produced in the UV, visible and NIR spectral ranges, from 250 nm to 2000 nm. All optical components of the FTC are made for high LIDT and provide stable and reliable performance even using them with high power lasers in industrial applications. A secondary laser beam from Flat top converter 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 FTC device.

Standard specifications

FLAT TOP CONVERTER FTC SPECIFICATIONS	
Input and output clear aperture	ø15 mm (depends on waveplate)
Conversion efficiency and transmission	Up to 70 % (Flat-Top beam mode) No less than 97 % (Gaussian beam mode)
LIDT coating	>10 [J/cm^2] (10 ns @ 1064 nm)
Controller	USB and RS232
Control interface	External
Dimensions (H x W x L)	105 x 53 x 62,5 mm FTC 105 x 70 x 62,5 mm FTC with beam dump (BD-6)

*Custom design available

Standard products

MODEL	APERTURE	WAVELENGTH	ADJUSTMENT	TYPE	CONTROL INTERFACE	TYPICAL APPLICATION	SKU
FTC	ø 6 mm	1030 nm	Motorised	DOE	USB or RS232	Flat top converter	19750
	ø 6 mm	515 nm	Motorised	DOE	USB or RS232	Flat top converter	19751
	ø 3 mm	1030 nm	Motorised	DOE	USB or RS232	Flat top converter	19752
	ø 3 mm	515 nm	Motorised	DOE	USB or RS232	Flat top converter	19753
	ø 6 mm	1064 nm	Motorised	DOE	USB or RS232	Flat top converter	19754
	ø 3 mm	1064 nm	Motorised	DOE	USB or RS232	Flat top converter	19755
	ø 6 mm	532 nm	Motorised	DOE	USB or RS232	Flat top converter	19756
	ø 3 mm	532 nm	Motorised	DOE	USB or RS232	Flat top converter	19757

Motorized laser power attenuators LPA

Main features

- Robust design
- Compatable with high optical powers
- Adjustable polarizer angle ±2 deg
- Large clear aperture
- External controller included
- User-friendly software
- 175,543 steps in full rotation
- ± 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/cm² (10 ns @ 266 nm)	257 nm	9326
			266 nm	9327
	0,2 - 96 %	3 J/cm² (10 ns @ 355nm)	343 nm	9264
			355 nm	9263
	0,1 - 98 %	5 J/cm² (10 ns @ 532 nm)	515 nm	9262
			532 nm	9260
		10 J/cm² (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 - ±0,004 deg (less than ± 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 10J/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/cm2 (10 ns @ 532 nm)	515+1030 nm	14898
	0,2 - 96 %	3 J/cm^2 (10 ns @ 355nm)	343 nm	11808
			355 nm	11805
	0,1 - 98 %	5 J/cm^2 (10 ns @ 532 nm)	515 nm	11807
			532 nm	11806
		10 J/cm^2 (10 ns @ 1064 nm)	1030 nm	11804
			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

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Manual laser power attenuators LPA-M

Main features

- Industrial robust design
- Wide wavelength adoption 240 nm - 2 µm
- Cost effective

Application examples

- Laser micromachining
- Laser power attenuation
- Research

Manual laser power attenuator LPA-M is a mechanically operated device used for precise laser power control. The LPA-M is used in the UV, visible, and NIR spectral ranges, from 240 nm to 2000 nm. All optical elements of these laser power attenuators are made for high LIDT and provide a stable and reliable performance even when using them with high power lasers in industrial applications.

What's in the box?

- Manual laser power attenuator
- Software
- Power supply DC 12V
- USB (1,5 m) cable

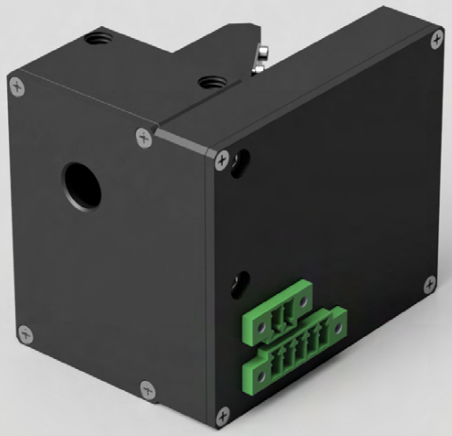
Standard specifications

VARIABLE MANUAL LASER POWER ATTENUATOR SPECIFICATIONS	
Adjustment	Manual
Input and output clear aperture	8 mm
Beam dump dissipation	<6W
Dimensions (H x W x L)	57 x 72 x 105 mm

*Custom design available

Standard products

MODEL	LIDT	WAVELENGTH	SKU
		350-2300 nm	18783
0,5-95 %	2 J/cm² (10 ns @ 266 nm)	257 nm	7896
		266 nm	7887
0,2-96 %	3 J/cm² (10 ns @ 355nm)	343 nm	7885
		355 nm	7886
0,1-98 %	5 J/cm² (10 ns @ 532 nm)	515 nm	7673
		532 nm	7672
	10 J/cm² (10 ns @ 1064 nm)	1030 nm	7671
		1064 nm	7670



OEM laser power attenuator LPA-OEM

Main features

- Compact, cost-effective design
- Detachable controller for better integration
- 175,543 µsteps in full rotation
- ±10 µsteps accuracy (± 0,02 deg, less than ± 0,05 % of laser power)
- Fast adjustment - less than 0,2 sec (min to max)
- High damage threshold up to 10 J/cm^2 (10 ns @ 1064 nm)
- Adjustable polariser angle for highest contrast

Application examples

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

OEM Laser power attenuator (LPA-OEM) is a compact, cost-effective motorised laser power control unit designed for integration. The LPA-OEM 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 stable and reliable performance even using them with high power lasers in industrial applications.

Standard specifications

LASER POWER ATTENUATOR LPA-OEM SPECIFICATIONS	
Input and output clear aperture	ø8 mm
Power attenuation range	<0,1% to >98%
LIDT coating	>10 [J/cm^2] (10 ns @ 1064 nm)
Close to open time	<0,2 sec
Resolution	175,543 µsteps in full rotation 21,943 µsteps in min/max rotation (0,002 deg, 7,2 arcsec, 0,035 mrad)
Accuracy	±10 µsteps (±0,02 deg, less than ±0,035%)
Dimensions (H x W x L)	58 x 36 x 57 mm LPA-OEM 58 x 50 x 67 mm LPA-OEM with beam controller 58 x 67 x 67 mm detached controller

*Custom design available

Standard products

ITEM MODEL	ATTENUATION RANGE	LIDT (COATING)	DESIGN WAVELENGTH	SKU
LPA-OEM	0,5 - 95%	2 J/cm2 (10 ns @ 266 nm)	257 nm	20051
	0,5 - 95%	2 J/cm2 (10 ns @ 266 nm)	266 nm	20052
	0,2 - 96 %	3 J/cm2 (10 ns @ 355 nm)	343 nm	20053
	0,2 - 96 %	3 J/cm2 (10 ns @ 355 nm)	355 nm	20054
	0,1 - 98 %	5 J/cm2 (10 ns @ 532 nm)	515 nm	20055
	0,1 - 98 %	5 J/cm2 (10 ns @ 532 nm)	532 nm	20056
	0,5 - 95 %	5 J/cm2 (10 ns @ 532 nm)	515+1030 nm	20059
	0,1 - 98 %	10 J/cm2 (10 ns @ 1064 nm)	1030 nm	20057
	0,1 - 98 %	10 J/cm2 (10 ns @ 1064 nm)	1064 nm	20058

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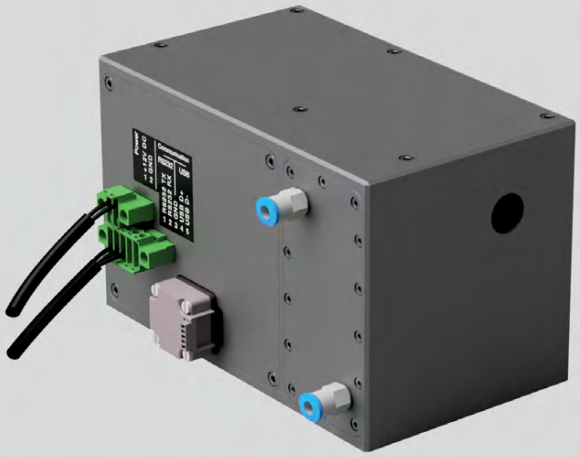

Unpolarized beam motorized laser power attenuators LPA-U

Main features

- Designed for unpolarised laser beam
- Compatable with high power regimes
- Beam offset compensated
- Integrated controller
- Absolute position encoder - no homing required
- High accuracy ±0,005 deg
- Robust design with water-cooling
- Clear aperture - ø12 mm
- Fast adjustment - less than 0,5 sec (min to max)
- High damage threshold: up to 10J/cm^2 (10 ns @ 1064 nm)

Application examples

- Precise laser micromachining
- Laser power stabilization
- Research

Advanced motorised laser power attenuator LPA-U is a unique device designed for unpolarised laser power control with integrated controller and absolute position encoder.
All optical components of the LPA-U are made for high LIDT and provide stable and reliable performance even using them with high power lasers in industrial applications.
A secondary laser beam from laser power attenuator unit is rejected to an internal beam dump. Water and air-cooling is used for avoiding any thermal effects or stress in the housing of the LPA-U device.

Standard specifications

UNPOLOARIZED BEAM MOTORIZED LASER POWER ATTENUATOR LPA-U SPECIFICATIONS	
Input and output clear aperture	12 mm
Controller	Integrated
Dimensions (H x W x L)	85 x 115 x 135 mm
Control interface	USB or RS232

Standard products

ITEM MODEL	ATTENUATION RANGE	DIMENSIONS (H X W X L)	DESIGN WAVELENGTH	SKU
LPA-U	2 - 95%	85 x 93,5 x 135 mm	1070 nm	21710

High-power motorized beam expanders MEX-HP-V2

Main features

- High power optical design (up to 200 W @ 1030 nm, 500 fs, 1 Mhz)
- No internal reflections on optical elements
- All-in-one design with an integrated controller
- Two lens simultaneous movement assuring no misfocus
- Absolute encoder (both lenses)
- Fused silica optical elements
- Adjustment time <0,7 sec (all magnifications)
- Diffraction limited performance for all magnifications
- Remotely changing focused beam spot size and its position on Z axis

What's new?

- 30% faster and more stable lens movement (<0,7 sec)
- Optimized for 24/7 usage
- Improved pointing stability <0,1 mrad or <0,3 mrad
- Redesigned Controller with Reverse polarity and Overcurrent protection

Application examples

- Industrial laser micromachining 24/7
- Precise laser micromachining
- High power laser beam management
- Research

High power motorised laser beam expanders MEX-HP-V2 series are used to increase the laser beam diameter and adjust divergence. The optical design is dedicated for high power ultrafast femtosecond laser applications. Improved lens movement speed and pointing stability ensure better control quality.
These magnification (zoom) beam expanders are designed for the required wavelength and each type of our beam expanders has motorized divergence adjustability. Standard or custom-made beam expanders feature a unique mechanical closed-loop sliding-lens design ensuring high pointing stability and minimal dimensions.

What's in the box?

- Motorised laser beam expander MEX-HP
- USB key with software and manual
- Power supply DC 12V
- USB (1,5 m) cable

Standard specifications

HIGH POWER MOTORIZED LASER BEAM EXPANDER SPECIFICATIONS	
Adjustment	Motorized
Divergence	Adjustable
Lens material	UVFS
Transmission	>97% (MEX13-HP), >95% (MEX15-HP)
Control interface	USB or RS232
Controller	Integrated
Housing material	Black anodized aluminum
Max. laser power	Up to 200 W @ 1030 nm, 500 fs, 1 MHz
LIDT	10 J/cm² (10 ns @ 1064 nm)

*Custom design available

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Standard products

ITEM MODEL	EXPANSION	CLEAR INPUT APERTURE	CLEAR OUTPUT APERTURE	RECOMMENDED MAX INPUT BEAM DIAMETER (1/E2)	DIMENSIONS (H X W X L)	DESIGN WAVELENGTH	POINTING STABILITY	SKU
MEX13-HP-V2	1.0x - 3.0x continuous	11,5 mm	28 mm	ø7 mm (1x) - ø6 mm (3x)	60 x 60 x 215 mm	1030-1064 nm	<0,5 mrad	31007
						515-532 nm		31011
						343-355 nm		31015
						1030-1064 + 515-532 nm		31009
						515-532 + 343-355 nm		31013
						257-266 nm		31258
						760-840 nm		31259
						390-410 nm		31260
						400 + 800 nm		31261
						1030-1064 nm	<0,2 mrad	31006
						515-532 nm		31010
						343-355 nm		31014
						1030-1064 + 515-532 nm		31008
						515-532 + 343-355 nm		31012
						257-266 nm		31262
						760-840 nm		31263
						390-410 nm		31264
						400 + 800 nm		31265
MEX15-HP-V2	1.0x - 5.0x continuous	11,5 mm	24 mm	ø7 mm (1x) - ø3,3 mm (5x)	65 x 65 x 250 mm	1030-1064 nm	<0,5 mrad	31017
						515-532 nm		31021
						343-355 nm		31025
						1030-1064 + 515-532 nm		31019
						515-532 + 343-355 nm		31023
						257-266 nm		31266
						760-840 nm		31267
						390-410 nm		31268
						400 + 800 nm		31269
						1030-1064 nm	<0,2 mrad	31016
						515-532 nm		31020
						343-355 nm		31024
						1030-1064 + 515-532 nm		31018
						515-532 + 343-355 nm		31022
						257-266 nm		31270
						760-840 nm		31271
						390-410 nm		31272
						400 + 800 nm		31273

Cables compatable with MEX-HP

ADDITIONAL CABLES	CABLE LENGTH	SKU
RS232-MEX13-HP RS232-MEX15-HP	1,8 m	38028 38027
RS232-MEX13-HP RS232-MEX15-HP	3 m	38032 38033
RS232-MEX13-HP RS232-MEX15-HP	5 m	38028 38029
RS232-MEX13-HP RS232-MEX15-HP	10 m	38030 38031

Mounting options for high-power motorized beam expanders MEX-HP

MOUNTING OPTION	FOR BEAM HEIGHT OF	SKU
Manual 4 axis translation stage M-STAGE-W	27 mm (±2 mm travel)	29135

Compact motorized laser beam expanders MEX-V2

Main features

- Highest beam pointing stability (< 0,1 mrad)
- All-in-one design with integrated controller
- Two lens simultaneous SMART movement assuring no misfocus
- Absolute encoder (both lenses)
- Adjustment time <0,7 sec (all magnifications)
- Fused silica optical elements
- No homing after switching on/off
- Diffraction limited performance for all magnifications
- Remotely changing focused beam spot size and its position on Z axis

What's new?

- 30% faster and more stable lens movement (<0,7 sec)
- Optimized for 24/7 usage
- Improved pointing stability <0,1 mrad or <0,3 mrad
- Redesigned Controller with Reverse polarity and Overcurrent protection

Application examples

- Industrial laser micromachining 24/7
- Life sciences
- Research

Motorised laser beam expanders MEX-V2 series are used to increase the laser beam diameter and adjust divergence. Standard or custom-made beam expanders feature a unique mechanical closed-loop sliding-lens design ensuring high pointing stability and minimal dimensions. Improved lens movement speed and pointing stability ensure better control quality. These variable magnification (zoom) beam expanders and reducers are designed for the required wavelength and each type of our beam expanders has motorized divergence adjustability.

What's in the box?

- Motorised laser beam expander MEX-V2
- USB key with software and manual
- Power supply DC 12V
- USB (1,5 m) cable

Standard specifications

MOTORIZED LASER BEAM EXPANDER SPECIFICATIONS		
OPTICAL	Magnification ranges	MEX13 - 1,0x-3,0x; MEX18 - 1,0x-8,0x
	Clear input aperture	11,5 mm
	Clear output aperture	MEX13 - ø23mm; MEX18 - ø38mm; MEX18-ACH- ø23mm
	Optical element number	3 (MEX13, MEX18), 4 (MEX18-ACH)
	LIDT coating	>10 [J/cm²](10 ns @ 1064nm)
	Pointing stability during lens movement	
	Adjustment time MIN to MAX magnification and divergence	
	Available coatings	1064 nm, 1030 nm, 532 nm, 515 nm, 355 nm, 343 nm, custom
MECHANICAL	MEX13 mechanical dimensions	140x 45 x 45 mm
	MEX18 mechanical dimensions	237 x 45 x 45 mm
	MEX18-ACH mechanical dimensions	226 x 45 x 45 mm
	Housing material	Anodized aluminium
Electronic	Communication	Using ASCII commands described in manual
	Software interface	BDS software
	Output voltage	DC 12 V
	Control interface	USB, RS232, Ethernet (using an additional adapter)
	Operating temperature	+10°C ... +40 °C
	Mounting holes	M4 on the bottom side

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Standard products

ITEM MODEL	EXPANSION	CLEAR INPUT APERTURE	CLEAR OUTPUT APERTURE	RECOMMENDED MAX INPUT BEAM DIAMETER (1/E2)	DIMENSIONS (H X W X L)	DESIGN WAVELENGTH	POINTING STABILITY	SKU
MEX13	1.0x - 3.0x continuous	11,5 mm	23 mm	⌀5 mm	45 x 45 x 140 mm	1030-1064 nm	<0,3 mrad	29283
						515-532 nm		29284
						343-355 nm		29285
						1030-1064 + 515-532 nm		29286
						515-532 + 343-355 nm		29287
						760-840 nm		31274
						390-410 nm		31275
						400 + 800 nm		31276
						1030-1064 nm	<0,1 mrad	29288
						515-532 nm		29289
						343-355 nm		29290
						1030-1064 + 515-532 nm		29291
						515-532 + 343-355 nm		29292
						760-840 nm		31277
						390-410 nm		31278
						400 + 800 nm		31279
MEX18	1.0x - 8.0x continuous	11,5 mm	38 mm	⌀3 mm	45 x 45 x 237 mm	1030-1064 nm	<0,3 mrad	29293
						515-532 nm		29294
						343-355 nm		29295
						1030-1064 + 515-532 nm		29297
						515-532 + 343-355 nm		29298
						760-840 nm		31280
						390-410 nm		31281
						400 + 800 nm		31282
						1030-1064 nm	<0,1 mrad	31284
						515-532 nm		31285
						343-355 nm		31286
						1030-1064 + 515-532 nm		31287
						515-532 + 343-355 nm		31288
						760-840 nm		31289
						390-410 nm		31290
						400 + 800 nm		31291
MEX18-ACH	1.0x - 8.0x continuous	11,5 mm	38 mm	⌀2 mm	45 x 45 x 237 mm	350-800 nm	<0,3 mrad	31283

Accessories for motorized expanders compatable with MEX, MEX-HP devices

ITEM MODEL	APPLICATION	SKU
M-STAGE	MEX adjustment	12571
M-STAGE-W	MEX-HP adjustment	29135
CP-MEX	MEX device cooling	
CP-MEXHP	MEXHP device cooling	

Available control cables compatable with MEX13, MEX18, MEX18-ACH devices

CABLE TYPE	CABLE LENGTH	SKU
RS232-MEX-V2	1,8 m	29317
RS232-MEX-V2	5 m	29318
RS232-MEX-V2	10 m	29319
USB-MEX-V2	3 m	29320