

Our gimbaled lens positioners cover a broad spectrum of optic configurations. The simple 2-axis models are the basis for more complex positioning requirements, including rotational positioning for polarizers or cylindrical lenses. All models use precision rolled 80TPI adjustment screws for pitch/yaw adjustment. Our lockable models include non-influencing locks that securely hold the mechanism in place.

Providing X, Y, tip and tilt in a small robust package, the 4-axis LDP laser diode positioner is ideal for industrial applications, and includes a safety shutter for security. Our OT.5-5SF spatial filter uses our OT.5 series optic translator as the basis for its mechanical design and is a compact solution for cleaning up your light source.

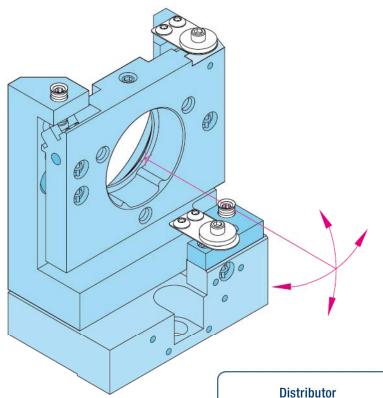
Both bare fiber and connectorized fiber translator systems round out this section. The BFT series of fiber translators are available in 3- and 5-axis versions as well as polarizing and non-polarizing models. The BFC series of fiber chucks slide into the BFT translators and cover a variety of fiber sizes from 80  $\mu$ m to 1 mm, as well as GRIN rods. Our CFT connectorized fiber translators come in 3- and 5-axis polarized models. These translators are compatible with the CFC fiber chucks, and the chucks are connectorized to fit SMA, NTT, and ATT fiber connectors.

#### **Gimbal Mounts**

Standard	
1.0" and 2.0" Optic	268
1.0" Optic, Polarizing	270
Cylindrical	274
eXtreme	
1.0" and 2.0" Optic	269
1.0" Optic, Polarizing	271
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Almost Gimbal	
1.0" and 2.0" Optic	272
1.0" Optic, Polarizing	273

#### Laser Diode Positioner

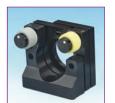
Front & Back Adjustable	276
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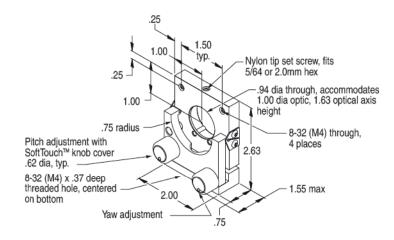
OG-2.0

# Gimbal Mounts

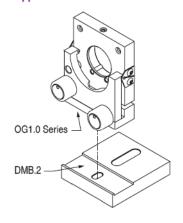
Standard 1 and 2 Inch

#### 1 Inch, Standard Gimbal Mount / OG-1.0

Note that dimensions in parentheses (mm) reflect metric assembly feature



#### **Application**



#### **Product Features**

- 80 pitch adjustment screws
- 3-point optic mounting
- Maximized clear aperture
- Vacuum compatible versions available

#### **Performance Specifications**

Travel / axis	
OG-1.0	12°
OG-2.0	8.5°
Minimum controllable motion	
OG-1.0	10 arc sec.
OG-2.0	6 arc sec.

#### Related Products

DMB.1 mounting plate	266
DMB.2 mounting plate	266

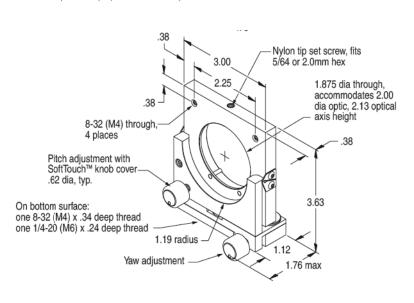
#### **Order Information**

standard optical gimbal, 1.0 inch	0G-1.0
standard optical gimbal, 2.0 inch	OG-2.0

**Metric Option** — for metric assembly features on this product, add '-M' after model number.

#### 2 Inch, Standard Gimbal Mount / OG-2.0

Note that dimensions in parentheses (mm) reflect metric assembly features

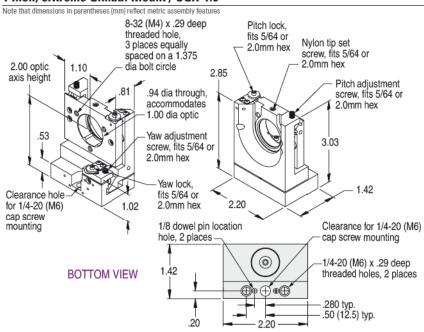


The OG series of optical gimbal mounts offer a compact and robust mounting platform for laser cavity applications. Both the OG-1.0 and OG-2.0 use our precision rolled 80TPI adjustment screws for accurate gimbaled positioning.

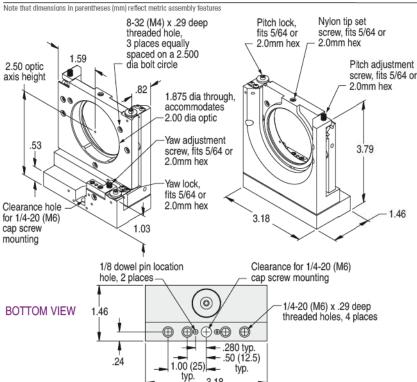
3-point location pads hold optic securely in place. Added 8-32 mounting holes give increased mounting flexibility for non-standard optic configurations. All models use our SoftTouch™ color coded knob caps for easy axis identification in low light conditions.

#### 1 and 2 Inch eXtreme

#### 1 Inch, eXtreme Gimbal Mount / OGX-1.0



#### 2 Inch, eXtreme Gimbal Mount / OGX-2.0



The OGX series of gimbal mounts offers the ultimate in stability and ease-of-adjustment in a true gimbal mount. Adjustable and lockable from above, this new series of mount provides maximum clear aperture in a gimbal mount. Based on the lock architecture of our OTX optical translators, these mounts can take a 4G jolt without moving 5 microns — you can design them into applications where long-term stability is specified. Siskiyou eXtreme gimbal mounts — optimized for eXtreme conditions!







OGX-1.0 back



OGX-2.0 back

#### **Product Features**

- 100 pitch adjustment screws
- 3-point optic mounting
- Maximized clear aperture
- Vacuum compatible versions available

#### **Performance Specifications**

Travel / axis	
OGX-1.0	7° pitch and yaw
OGX-2.0	6° pitch, 7° yaw
Minimum control	lable motion
OGX-1.0	8.1 arc sec pitch, 5.4 arc sec yaw
OGX-2.0	6.0 arc sec pitch, 5.3 arc sec yaw

#### **Related Products**

dovetail rails & carriers,	130
DTR & DTC series TC-4 table/pedestal clamp	138
10 1 table, poacotal clamp	100

#### **Order Information**

eXtreme optical gimbal, 1.0 inch	0GX-1.0
eXtreme optical gimbal, 2.0 inch	0GX-2.0

Metric Option — for metric assembly features on this product, add '-M' after model number.



#### Standard, Polarizing

1 Inch

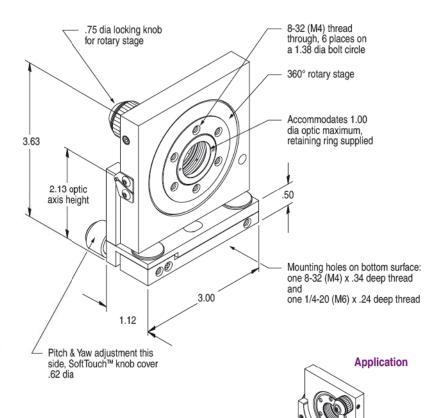
#### 1.0-inch optic / OG-1.0P

Note that dimensions in parentheses (mm) reflect metric assembly features





back, with RS-1.0i adapter



#### **Product Features**

- 80 pitch adjustment screws
- Pitch & Yaw adjustment
- 360° lockable rotation
- Vacuum compatible versions available upon request

#### **Performance Specifications**

Travel / axis	
Pitch and Yaw	8.5°
Rotation	360°
Minimum controllable motion	
Pitch and Yaw	6 arc sec.
Rotation	30 arc min.
Related Products	
DMB.1 mounting plate	266
OH.5 series optic holder	261

#### Order Information

RS-1.0i thread adapter

optical gimbal, 1.0 inch polarizing OG-1.0P

**Metric Option** — for metric assembly features on this product, add '-M' after model number.

The OG series of polarizing optical gimbal mounts offer a compact and robust mounting platform for polarizers, beamsplitters, and quarter-wave plates. They use our precision rolled 80TPI adjustment screws for accurate gimbaled positioning and our SoftTouch<sup>TM</sup> color coded knob caps for easy axis identification in low light conditions.

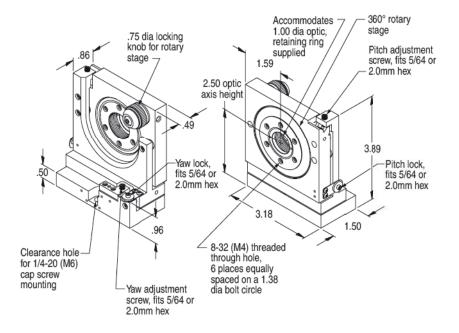
OG-1.0P Series

DMB.

Built into the gimbaled face plate is the rotational system from our RSA-1.0 rotation stage. A fine adjustment knob controls angular positioning through a 360° scale, graduated in 2° increments. The rotating platform can be securely locked in position by a non-influencing lock that is integrated into the fine adjustment knob. The center aperture of the rotating dial accepts 1.0-inch optics or OH.5 optic holders and comes with Delrin® retaining rings. Added 8-32 mounting holes in the dial face give increased mounting flexibility for non-standard optic configurations.

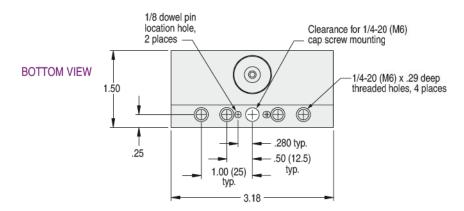
270

Note that dimensions in parentheses (mm) reflect metric assembly features









Siskiyou eXtreme polarizing mounts combine rotation on the optical axis, tip and tilt adjustment into a robust package that's adjustable from the top. All 3 axes are lockable, and the adjustment knob is at the top of the assembly for simple access. A variety of optical elements can be mounted in the rotating aperture with our OH series holders. Pin pockets in the base provide for rock-solid attachment to your optical chassis. Our eXtreme series is just what you need for critical applications.

#### **Product Features**

- 100 pitch adjustment screws
- Pitch & Yaw adjustment
- 360° lockable rotation
- Vacuum compatible versions available upon request

#### Performance Specifications

i oriorinanoo opoornoadoi	10
Travel / axis	
Pitch and Yaw	7
Rotation	360
Minimum controllable motion	Ď.
Pitch	5.5 arc sec
Yaw	5.1 arc sec
Rotation	30 arc min

#### **Related Products**

dovetail rails & carriers, DTR & DTC series	130
TC-4 table/pedestal clamp	138
OH.5 series optic holder	261
RS-1.0i thread adapter	72

#### **Order Information**

eXtreme optical gimbal, 1.0 inch polarizing OGX-1.0P

Metric Option — for metric assembly features on this product, add '-M' after model number.



Nev

Gimbal Mounts



# IAG100



# www.amstechnologies-webshop.com info@amstechnologies.com



#### **Product Features**

- Upper adjustment screw location
- 100TPI adjustment screws
- Patented spring-loaded design
- Vacuum compatible versions available upon request

#### **Performance Specifications**

Travel / axis	8°
Minimum controllable motion	
IAG100	8.0 arc sec.
IAG200	4.7 arc sec.

#### **Related Products**

AS spacers	110
PR precision rods	132

#### **Order Information**

1.0 inch optic mount	IAG100
2.0 inch optic mount	IAG200

Hex Drive Option — for hex drive on this product, add '-H' after Model Number.

Metric Option — for metric assembly features on this product, add '-M' after model number.

For both Options — add '-H-M' after model number.

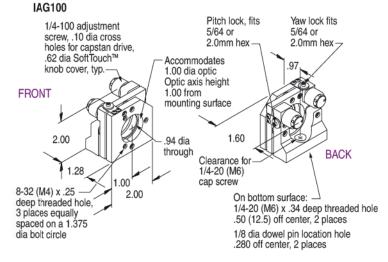
# Gimbal Mounts

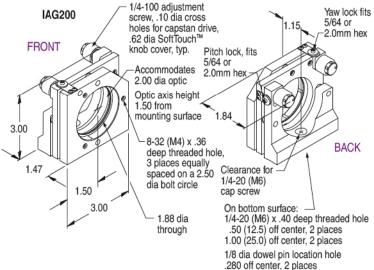
#### Almost Gimbal Mounts

1 and 2 Inch

#### 1.0- and 2.0-inch optic / IAG100 and IAG200

Note that dimensions in parentheses (mm) reflect metric assembly featu





#### Almost Gimbal Mounts

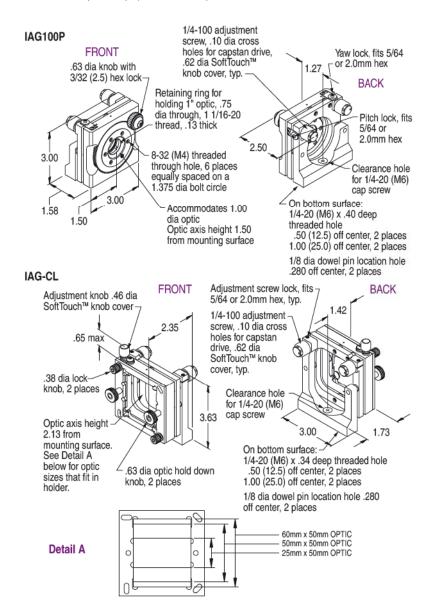
These unique mounts use our patented spring-loaded design (pat.#6590723) to create a mount that is neither Kinematic or Gimbal in its positioning of the optics. Though the motion most closely resembles a gimbal design by rotation about the optical center, the real attraction of these mounts is the location of the adjustment screws above the beam path. Our IAG series mounts use precision rolled 100TPI adjustment screws for excellent resolution and feel in the hand and come with our capstan knob caps with SoftTouch™ covers. Like all of our "I" series mounts the IAGs use our one wrench design. This allows the user to secure the optic, adjust the optic position, and lock the mount all with one wrench.

#### **Almost Gimbal Mounts, Polarizing**

1 Inch

#### 1.0-inch optic / IAG100P and IAG-CL

Note that dimensions in parentheses (mm) reflect metric assembly features





These unique mounts use our patented spring-loaded design (pat.#6590723) to create a mount that is neither Kinematic or Gimbal in its positioning of the optics. Though the motion most closely resembles a gimbal design by rotation about the optical center, the real attraction of these mounts is the location of the adjustment screws above the beam path. The IAG-P combines the convenience of the upper adjustment screw location with an integrated rotation stage (RSA-1.0) that enables the user to orient polarizing optics precisely. Our IAG series mounts use precision rolled 100TPI adjustment screws for excellent resolution and feel in the hand and come with our capstan knob caps with SoftTouch™ covers. Like all of our "I" series mounts the IAGs use our *one wrench* design. This allows the user to secure the optic, adjust the optic position, and lock the mount all with one wrench.



IAG100P



#### **Product Features**

- Upper adjustment screw location
- 100TPI adjustment screws
- Integrated optic polarization
- Vacuum compatible versions available upon request

#### Performance Specifications

Traval / avia	
Travel / axis	
Pitch and Yaw	8°
Roll	6°
Minimum controllable motion	
Pitch and Yaw	4.7 arc sec.
Roll	
IAG100P	30 arc min.
IAG-CL	6 arc sec.
Related Products	
AS spacers	110
PR precision rods	132
Order Information	
1.0 inch polarizing optic mount	IAG100P

**Metric Option** — for metric assembly features on this product, add '-M' after model number.

cylindrical lens positioner

IAG-CL

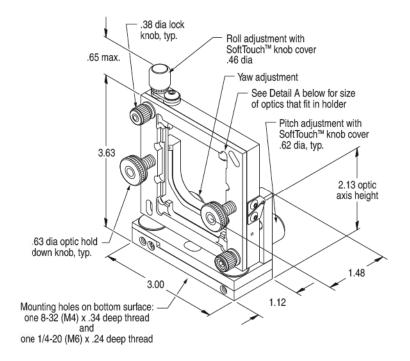


#### **Cylindrical Lens**

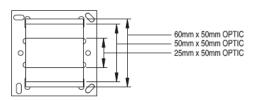
#### 3-axis / CLP3

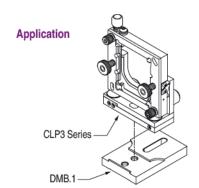
Note that dimensions in parentheses (mm) reflect metric assembly features











#### **Product Features**

- 80 pitch adjustment screws
- 3 axes of motion
- Maximized clear aperture
- Vacuum compatible versions available upon request

#### **Performance Specifications**

i citorinance opecinications	
Travel / axis	
Pitch and Yaw	8.5°
Roll	6°
Minimum controllable motion	6 arc sec.
Related Products	
DMB.1 mounting plate	266
Order Information	

**Metric Option** — for metric assembly features on this product, add '-M' after model number.

CLP3

#### **Cylindrical Lens Positioner**

The CLP3 cylindrical lens polarizer uses our time-tested OG-2.0 gimbal as a sturdy positioning platform. They use our precision rolled 80TPI adjustment screws for accurate gimbaled positioning and our SoftTouch™ color coded knob caps for easy axis identification in low light conditions.

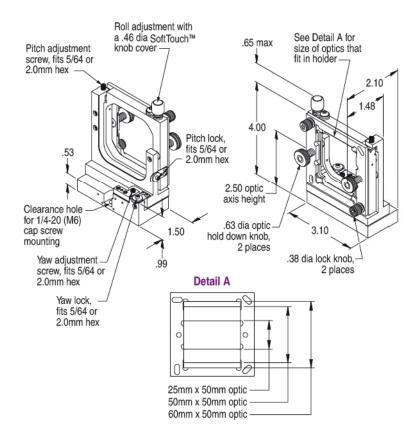
Rotational adjustment about the optical axis is achieved by a top mounted 80TPI adjustment screw and has a top viewed reference scale for easy alignment. Non-marring Delrin® mounting knobs hold the lens securely in place. The front mounting plate can be easily rotated to change the beam output by 90°.

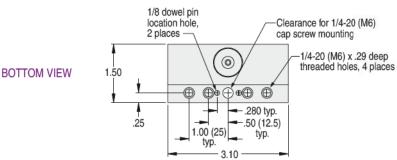
cylindrical lens positioner, 3-axis

#### eXtreme Cylindrical Lens

#### 3-axis / CLX-3

Note that dimensions in parentheses (mm) reflect metric assembly features





Siskiyou eXtreme cylindrical lens mounts combine rotation on the optical axis, tip and tilt adjustment into a robust package that's adjustable from the top. The unique frame accommodates three different sizes of cylindrical lens. The adjustment knob for the rotational axis lets you square up the lens to an input beam, or position an output beam's axis with high precision. It's at the top of the assembly for simple access. Pin pockets in the base provide for rock-solid attachment to your optical chassis. Based on the lock architecture of our OTX optical translators, these mounts can take a 4G jolt without moving 5 microns once they are locked into position. Our eXtreme series is just what you need for critical applications.





#### **Product Features**

- 100 pitch adjustment screws
- 3 axes of motion
- Maximized clear aperture
- Vacuum compatible versions available upon request

#### Performance Specifications

Travel / axis	
Pitch	6 degrees
Yaw	7 degrees
Roll	6 degrees
Minimum controllable motion	
Pitch	4.8 arc sec.
Yaw	5.1 arc sec.
Roll	6 arc sec.

#### **Related Products**

dovetail rails & carriers,	130
DTR & DTC series	
TC-4 table/pedestal clamp	138

#### **Order Information**

cylindrical lens positioner, eXtreme grade, CLX-3

Metric Option — for metric assembly features on this product, add '-M' after model number.



# Laser Diode Positioner

#### Front & Back Adjustable

#### 5-axis / LDP-1 Series

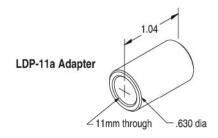
Note that dimensions in parentheses (mm) reflect metric assembly features

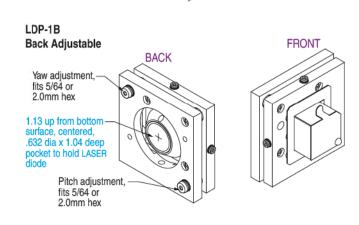




LDP-1

LDP-1 Front Adjustable Y axis adjustment, fits 5/64 or 2.0mm hex 2.19 4-40 (M2.5) clearance hole for mounting, 2 places 2.13 square X axis adjustment, fits 5/64 or 2.0mm he Ø) Pitch adjustment, fits 5/64 or Yaw adjustment. 2.0mm hex fits 5/64 or 2 0mm hex On bottom surface: 21 dia through hole 8-32 (M4) x .43 deep behind cover threaded mounting hole On bottom surface: **Common Dimensions** 8-32 (M4) x .31 deep shown in cyan-blue threaded mounting hole





#### **Product Features**

- 80 pitch adjustment screws
- 4 axes of adjustment
- Safety shutter
- Vacuum compatible versions available upon

#### **Performance Specifications**

Travel	
X and Y axis	0.12 inch (3.1 mm)
Pitch and Yaw	8°
Minimum controllable motion	
X and Y axis	1 μm
Pitch and Yaw	4.8 arc sec.

#### **Related Products**

PR precision rods

#### **Order Information**

www.siskiyou.com

laser diode positioner, front adjustable	LDP-1
laser diode positioner, back adjustable	LDP-1B
11-mm laser diode adapter	LDP-11a

Metric Option — for metric assembly features on this product, add '-M' after model number.

#### **Laser Diode Positioners**

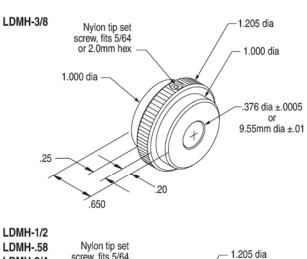
The LDP laser diode positioner uses the XY & tip/tilt mechanics from our popular BFT-5 fiber positioner (page 293) to create a compact 4-axis laser diode mount. The X and Y axis have 0.12-inches (3mm) of travel and are adjusted via 80TPI fine pitch screws. Tip/tilt motion uses 80TPI screws and have a total of 8-degrees of motion.

Both the LDP-1 and LDP-1B have 8-32 (M4) tapped holes on two edges for convenient mounting to PR series post. The LDP-1 has 4-40 clearance holes accessed from the front so that it can be bulkhead mounted off its back side leaving the tip/tilt adjustment screws accessible from the front. The LDP-1B has the same 4-40 clearance holes, but has the tip/tilt adjustments on the back side, allowing for through the bulkhead adjustments. The inner diameter of these laser diode positioners is 16mm and we have a 11mm adapter (LDP-11a) to accommodate the most common diode can sizes (other sizes available upon request). The LDP-1 and LDP-1B both have built-in safety shutters.

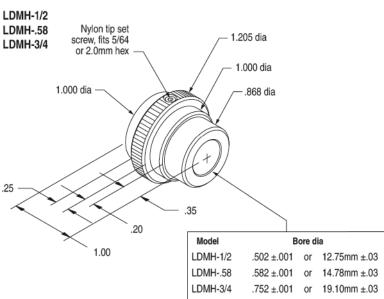
# Laser Diode Positioner

#### **Module Holder**

#### Mirror Mount Adapters / LDMH Series



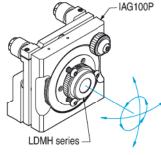




**Laser Diode Module Adapters** 

The LDMH series of laser diode module adapters are an economical solution for holding common spot or line generating devices in a wide variety of our optical mounts. All four sizes will easily drop in to any of our 1.0-inch mirror mounts to control spot elevation and azimuth location. To control rotation of line generat-





ing modules, they will bolt into our RSA-1.0 rotation stages with three 8-32 [M4] buttonhead or cap screws. For three axis control of elevation, azimuth and rotation, they will bolt into our IAG100-P and OG-1.0P gimbal mounts.

#### **Product Features**

Material

- Compatible with mirror mounts and rotation stages
- Fits most common LASER diode sizes
- Excellent heat sink qualities

#### **Performance Specifications**

1/2-inch diameter

laser diode module holder.

.58-inch diameter

laser diode module holder,

3/4-inch diameter

Lock screw	soft nylon tip
Related Products	
RSA-1.0 rotary stage	72
RSA-1.0i rotary stage	76
IM100.A2 mirror mount	206
IXM100.A2 industrial mount	214
CVM100 mirror mount	226
IAG100 & IAG100P mounts	272-273
OG-1.0 gimbal mount	268
OG-1.0P gimbal mount	270
Order Information	
laser diode module holder,	
3/8-inch diameter	LDMH-3/8
laser diode module holder,	

LDMH-1/2

LDMH-.58

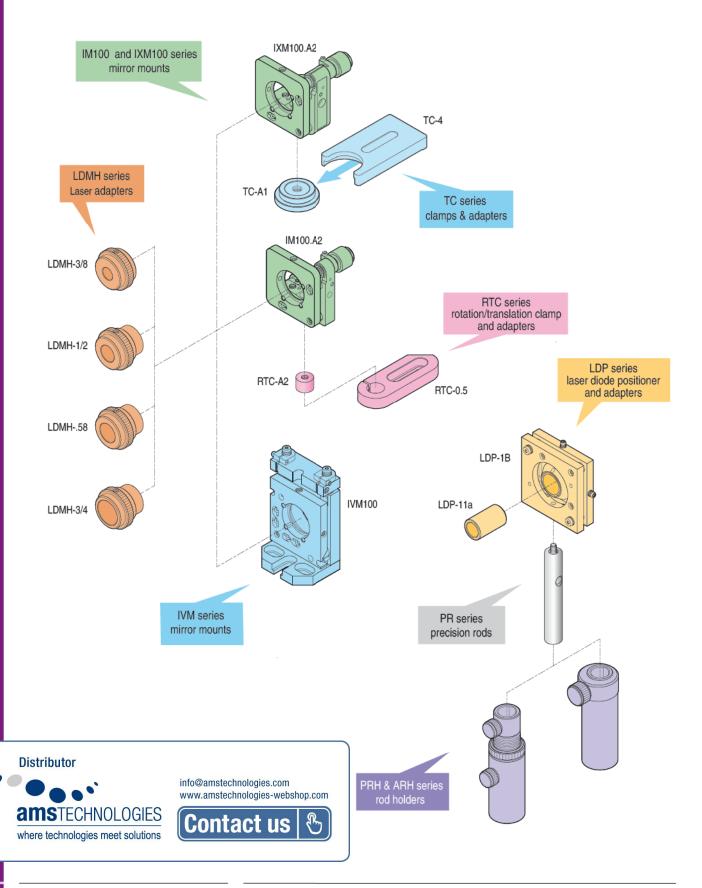
LDMH-3/4

aluminum



# Gimbal Mounts / Laser Diode Positioner

# **Applications**



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