

CHAPTERS

Manual Stages

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Multi-Axis Platforms

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Flexure Accessories

For current pricing, please see our website.

Customer-Configured NanoMax™ Stages (Page 1 of 2)

In the event that you need a configuration other than our standard preconfigured options, Thorlabs offers custom configured NanoMax™ platforms. These units typically ship within 24 hours.

To achieve this degree of configurability, Thorlabs has designed a complete set of actuators that are modular and can be fitted within seconds without needing any tools.

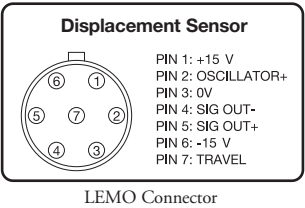
Simply choose the base platform from the models below and add the required actuators from the facing page.



Patents 6,186,016 and 6,467,762

NanoMax™ Platform, Piezoelectric Actuators, and Sensors

Adding strain gauge displacement sensors to the internal piezoelectric elements of the NanoMax™ platform enhances the resolution performance of the system by a factor of four. Additionally, it improves the linearity and drift performance of the stage while allowing the system to be operated in a closed-loop system. For complete details on the performance of the NanoMax™ platform with internal piezos and strain gauge displacement sensors please, refer to the MAX311D on page 547.



LEMO Connector

ITEM #	METRIC ITEM #	\$	£	€	RMB
MAX301	MAX301/M	\$ 2,075.00	£ 1,494.00	€ 1.805,25	¥ 16,537.75

NanoMax™ Platform, Piezoelectric Actuators

Adding internal piezoelectric elements to the basic NanoMax™ platform provides 20 μm of high-resolution electrical control (0 to 75 V). The typical piezo resolution is 20 nm. For complete details on the performance of the NanoMax™ platform with internal piezoelectric actuators, please refer to the MAX312D on page 547.



SMC Piezo Connector

ITEM #	METRIC ITEM #	\$	£	€	RMB
MAX302	MAX302/M	\$ 1,210.00	£ 871.20	€ 1.052,70	¥ 9,643.70

NanoMax™ Platform, No Actuators



Use this base unit if your application does not require piezoelectric actuators. Please note that while the external drives can be easily changed in the field, internal piezoelectric actuators are incorporated directly into the platform and cannot be added later. If your needs change and you subsequently require piezoelectric actuators, the piezo extenders shown on the next page can be used along with our other drive options.



MAX303

ITEM #	METRIC ITEM #	\$	£	€	RMB
MAX303	MAX303/M	\$ 875.00	£ 630.00	€ 761,25	¥ 6,973.75

Customer-Configured NanoMax™ Stages (Page 2 of 2)

High-Resolution Differential Micrometer

NEW
product



DRV3

This high-resolution differential micrometer drive with 50 nm positional resolution is matched in performance to the capabilities of the NanoMax™ series platforms.

Full details on this drive can be found on page 603.

Specifications*

- **Travel:**
 - Coarse: 0.16" (4 mm)
 - Fine: 300 μ m
- **Resolution:**
 - Coarse: 1 μ m
 - Fine: 50 nm

*When incorporated into a NanoMax Stage, please note that the travel of the DRV3 is limited by the stage.

ITEM #	\$	£	€	RMB
DRV3	\$ 308.70	£ 222.26	€ 268,57	¥ 2,460.34

Stepper Motor



DRV001

The complete presentation for this stepper motor drive is on page 610. When used with an apt™ series stepper motor driver, it provides 25,600 microsteps per revolution.

Specifications in Stage

- **Travel:** 0.16" (4 mm)
- **Resolution:** 39 nm
- **Holding Torque:** 23.1 N·cm

ITEM #	\$	£	€	RMB
DRV001	\$ 585.00	£ 421.20	€ 508,95	¥ 4,662.45

Thumbscrew



DRV004

This thumbscrew drive is often used in applications or positioning tasks that require a high degree of stability, yet have lower resolution requirements.

Specifications*

- **Travel:** 0.16" (4 mm)
- **Resolution:** 1 μ m
(500 μ m Thread Pitch)

*When incorporated into a NanoMax Stage, please note that the travel of the DRV004 is limited by the stage.

ITEM #	\$	£	€	RMB
DRV004	\$ 96.50	£ 69.48	€ 83,96	¥ 769.11

Piezoelectric Extenders

These piezoelectric extenders provide 20 μ m or 80 μ m of high-resolution travel to any of the modular drives shown above. The modular design allows these extenders to be attached in series with any of Thorlabs' modular drives. These extenders are ideal for applications that require high-resolution movements over a small range. Coarse adjustments are made using any one of our modular drives shown above.

Specifications

- Travel: 20 μ m
- Closed-Loop Resolution: 5 nm
- Displacement Sensor
- Ideal Controller: TPZ001 with TSG001 (See Pages 636 – 639)



DRV120

Specifications

- Travel: 80 μ m
- Resolution: 20 nm
- Ideal Controller: BPC203 (See Pages 642 – 643)



DRV181

ITEM #	\$	£	€	RMB
DRV120	\$ 995.00	£ 716.40	€ 865,65	¥ 7,930.15
DRV181	\$ 995.00	£ 716.40	€ 865,65	¥ 7,930.15

