## **Optomechanics**

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## XT95 Series Rail System

The XT95 Series Rail System is our largest, most rigid structural product line. Originally designed for constructing vacuum-sealed flight paths, these rails have proven invaluable during the construction of large-scale optical systems, 3D load-bearing structures, and enclosures due to their ability to support several hundred pounds.

The four 9.9 mm thick wings on the edges of the standard XT95 rails act as a set of dovetails for the XT95P2 Drop-On Carriage featured on page 209. The T-slots that run along the length of the extrusion accept our XT95N2 (M6 x 1.0), XT95N3 (M4 x 0.7), or XT95N4 (M4 x 0.7) T-Nuts, which facilitate mounting of components directly to a rail.

An extensive line of additional components that maximize the versatility of the XT95 Rail System can be found on the upcoming pages. The 95 mm rails are available in custom lengths up to 3.5 m (-12 ft). Please call your local sales office or visit us at www.thorlabs.com to order custom lengths.



Raw Extrusion Rails

## **Finished Rails**

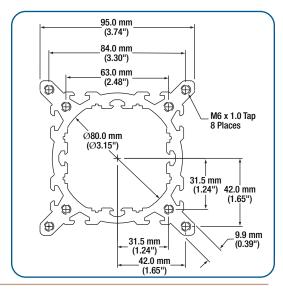
ITEM#	\$	£	€	RMB	DESCRIPTION	
XT95-250	\$ 57.30	£ 39.80	€ 50,90	¥ 483.90	XT95 Rail, 250 mm	
XT95-500	\$ 79.10	£ 54.90	€ 70,30	¥ 668.00	XT95 Rail, 500 mm	
XT95-750	\$ 102.00	£ 70.80	€ 90,60	¥ 861.30	XT95 Rail, 750 mm	
XT95-1000	\$ 134.30	£ 93.10	€ 119,30	¥ 1,134.10	XT95 Rail, 1000 mm	
XT95-1500	\$ 175.90	£ 122.00	€ 156,20	¥ 1,485.40	XT95 Rail, 1500 mm	
XT95-2000	\$ 234.10	£ 162.30	€ 207,90	¥ 1,976.80	XT95 Rail, 2000 mm	

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Unanodized	Raw	Extrusion:	2	m

l	ITEM#	\$	£	€	RMB	DESCRIPTION
	XT95RL2	\$176.90	£122.70	€157,10	¥1,493.80	XT95 Raw Rail, 2000 mm



- Machined of Heavy-Duty Aluminum Extrusion for Rigid Construction
- 7.0 kg/m Rigid Extrusion
- T-Slots Provide Additional Design Flexibility
- Fully Compatible with Competitors' Rails
- 2.0 m (6.56 ft) Raw Extrusion Available
- Custom Lengths up to 3.5 m (~12 ft) Available



## **XT95 Series Rail T-Nuts**

T-Nuts are used to attach carriage plates to the external slots on the XT95 Series of Rails. The XT95N2 and XT95N3 T-Nuts, which are designed with M6 and M4 threading, respectively, need to be inserted from the end of the rail. In contrast, the XT95N4 Drop-On T-Nut can be inserted anywhere along the length of the rail. Simply insert the XT95N4 T-nut into the rail channel and turn the locking screw; the T-nut will rotate until the side corners make contact with the channel, thereby allowing it to lock down the mounted component or plate.



ITEM#	\$	£	€	RMB	DESCRIPTION
XT95N2	\$ 2.10	£ 1.45	€ 1,90	¥ 17.80	15.0 mm Long T-Nut, M6 Tap
XT95N3	\$ 2.10	£ 1.45	€ 1,90	¥ 17.80	15.0 mm Long T-Nut, M4 Tap
XT95N4*	\$ 22.00	£ 15.30	€ 19,60	¥ 185.80	Drop in T-Nut, M4 x 0.7 Tap

<sup>\*</sup> Price per package of 10.

- Unique Design of XT95N4 T-Nut Allows it to Drop into Rail
- Rotate T-Nut into a Locked Position
- Release and Removal from Rail is Just as Easy as Tightening
- Machined Boss Adds to Depth of Tap and Keeps Nut Centered in Rail Slot

