

HT11 Series

Heavy duty XY stages for whole animal and industrial imaging

The HT11 Series is ideal for automated XY scanning of larger samples and is underpinned by the technology from Prior's hardness testing stages.

The HT11300KT and HT11600KT have surface areas of 300 x 300 mm and 600 x 600 mm respectively, with both capable of supporting loads of up to 100 kg to enable large and complex equipment to be translated.

This includes both whole animal behavioral electrophysiology apparatus and customized industrial assemblies.

The HT11 Series surfaces feature an M6 tapped breadboard pattern for easy attachment, and can also be fixed directly to M6 or 1/4-20 breadboards.

Finally, the stages use Prior's patented Intelligent Scanning Technology (IST) to optimize stage accuracy, linearity and other performance characteristics.



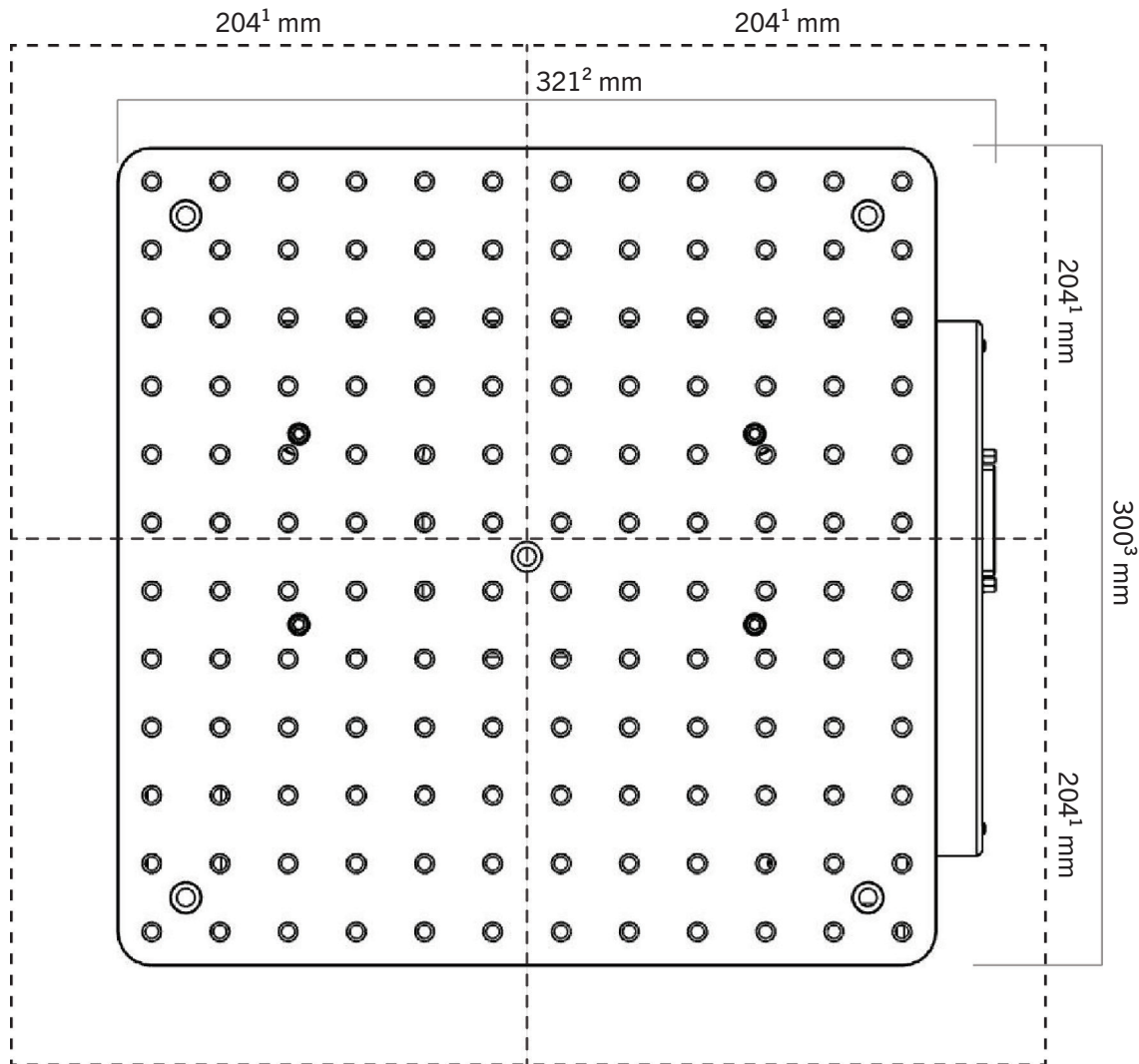
Key Features

- Load capacity of up to 100 kg.
- Intelligent Scanning Technology™ (US Patent 7,330,307).
- Mounts directly to 1/4-20 and M6 breadboards.
- Heavy duty translation stage with 300 x 300 mm or 600 x 600 mm M6 tapped breadboard top plate.
- Compatible with live animal neuroscience equipment.

Applications

- Metrology
- Electrophysiology
- Multiphoton microscopy
- Industrial microscopy

Dimensions*

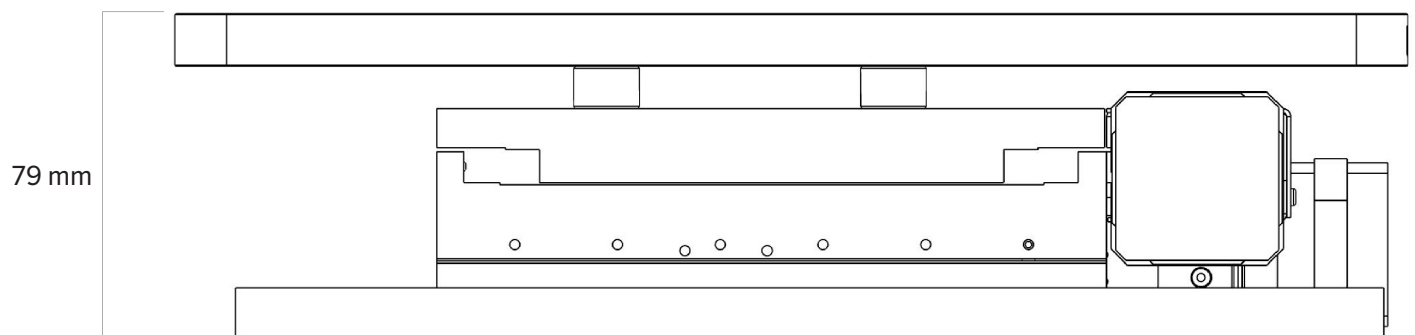


*Outer dotted lines show the maximum footprint dimensions of the stage when at the limits of travel.

1 Changes to 354 mm with HT11600KT

2 Changes to 600 mm with HT11600KT

3 Changes to 600 mm with HT11600KT



Specifications

	HT11300KT	HT11600KT
Travel range	108 mm x 108 mm	108 mm x 108 mm
Unidirectional repeatability ¹	<0.6 µm	<0.6 µm
Bidirectional repeatability ¹	<2.5 µm	<2.5 µm
Metric accuracy ¹	0.16 µm/mm	0.16 µm/mm
Full travel accuracy	<16.0 µm	<16.0 µm
Resolution ²	0.02 µm	0.02 µm
Squareness ¹	<40 arcsec	<40 arcsec
Maximum velocity ³	30 mm/s	30 mm/s
Maximum load ⁴	100 kg	100 kg
Encoders	No	No
Motor type	400 step	400 step
Screw pitch	2 mm	2 mm
Weight	9.5 kg	15.0 kg
Surface area	300 x 300 mm	600 x 600 mm

1. As per Prior Scientific's test methodology, typical value.
 2. Defined as the minimum motor step resolution for non-encoded stages, defined as the encoder resolution for encoded stages.
 3. Defined as 2.5x the default velocity, true maximum velocity is dependent on sample mass.
 4. Point or distributed load.

Ordering Information

Part Number	Description
HT11300KT	Heavy duty translation XY stage for whole animal and industrial imaging with 108 mm x 108 mm travel range and 300 mm x 300 mm breadboard.
HT11600KT	Heavy duty translation XY stage for whole animal and industrial imaging with 108 mm x 108 mm travel range and 600 mm x 600 mm breadboard.

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