

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 300×300 mm and 600×600 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 ¼-20 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.

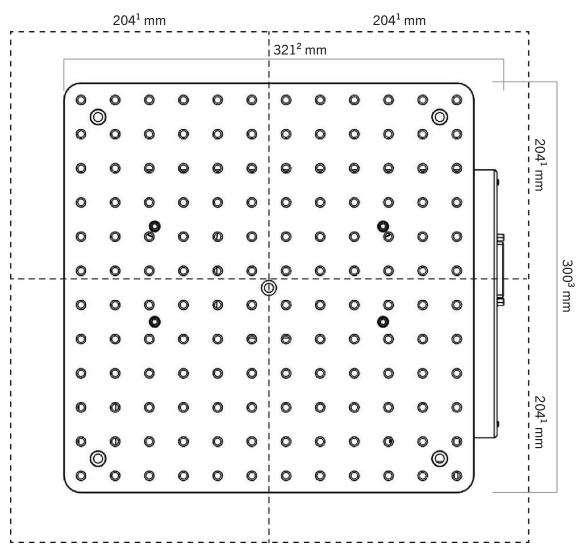
Applications

- Metrology
- Electrophysiology
- Multiphoton microscopy
- Industrial microscopy

HT11-Series-V3.1-1224-EN prior.com

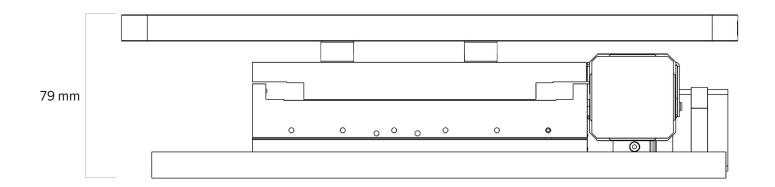


Dimensions*



 $^{\star} \text{Outer dotted lines show the maximum footprint dimensions of the stage when at the limits of travel.}$

- 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.

Ordering Information

| Part Number | Description |
|-------------|---|
| HT11300KT | Heavy duty translation XY stage for whole animal and industrial imaging with $108 \text{mm} \times 108 \text{mm}$ travel range and $300 \text{mm} \times 300 \text{mm}$ breadboard. |
| HT11600KT | Heavy duty translation XY stage for whole animal and industrial imaging with $108 \text{mm} \times 108 \text{mm}$ travel range and $600 \text{mm} \times 600 \text{mm}$ breadboard. |

UNITED KINGDOM

Prior Scientific Instruments Ltd.
Units 3-4 Fielding Industrial Estate
Wilbraham Road, Fulbourn
Cambridge, CB21 5ET
United Kingdom
Email: inquiries@prior.com

Email: inquiries@prior.com Phone: +44 (0)1223 881711

U.S.A.

Prior Scientific, Inc. 80 Reservoir Park Drive Rockland, MA. 02370 U.S.A.

Email: info@prior.com Phone: +1 781 878 8442

GERMANY

Prior Scientific Instruments GmbH Maria-Pawlowna-Str. 4 D-07743, Jena, Germany Email: jena@prior.com Phone: +49 (0)3641 242 010

JAPAN

Kayabacho 3rd Nagaoka Bldg 10F, 2-7-10, Nihonbashi Kayabacho, Chuo-Ku, Tokyo103-0025, Japan

Email: info-japan@prior.com Phone: +81 (0)3 5652 8831

CHINA

Prior Scientific Instruments (Suzhou) Ltd.
Room 118, Meilihua Hemu Park
No. 393 Suhong Middle Road, Suzhou Industrial Park
Suzhou, 215000, China
Email: info-china@prior.com
Phone: +86 (0)512 6617 5866



info@microscopeworld.com | 800-942-0528



^{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.

Point or distributed load.