

# YAX

## Positioning stages

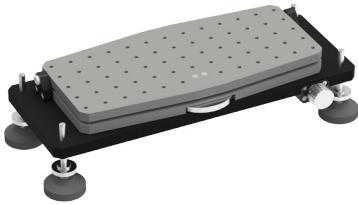
XNAS->



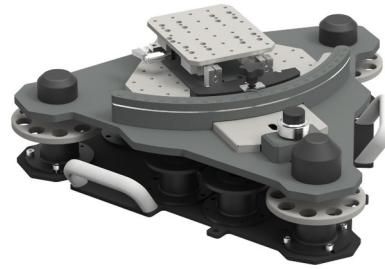
<-XNASA



XNASB->



<-XWAS



YASA



YASB



YASC



YASD



YLS

• **INFRAMET**

## Positioning stages

Fig.1. Photos of positioning stages offered by Inframet

### 1 Basic information

YAX positioning stages are mechanical stages that enable precision positioning of angular/linear position of tested imaging/laser system.

Inframet offers two main series of YAX stages:

1. X series stages for manual positioning.
2. Y series stages for motorized positioning.

Following stages are offered:

X series


1. XNAS
2. XNASA
3. XNASB
4. XWAS

Y series

1. YASA
2. YASB
3. YASC
4. YASD
5. YLS

### 2 XNAS


XNAS enables manual regulation of angular and vertical regulation of position of tested imaging/laser system in narrow angle range.

XNAS ... X - manual narrow azimuth stage ...- Load Capacity		View	
Technical specification			
Type	Manual		
Load Capacity	5, 10, 15 kg		
Azimuth range	$\pm 3^\circ$		
Elevation range	$\pm 3^\circ$		
Vertical regular	100 mm		
Grid of M6 holes spaced by 25 mm, on the top plane			
Possibility fix to the optical table series AT and MTAB			
Adapter to fix devices at 90 degrees			
Adapters to height adjustment			
Adapter with picatinny rail			
Dimensions/mass XNAS5:	85 x 525 x 450 mm / 7,5 kg		
Dimensions/mass XNAS10 :	85 x 525 x 550 mm / 9 kg		
Dimensions/mass XNAS15:	85 x 525 x 650 mm / 12 kg		

## Positioning stages

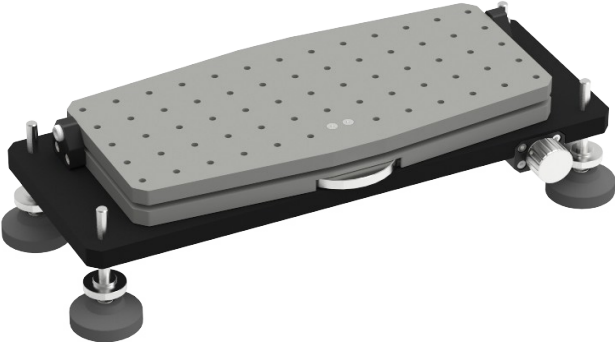
### 3 XNASA

XNASA enables manual regulation of angular and vertical regulation of position of tested imaging/laser system in medium/narrow angle range.

XNASA .... X - manual narrow azimuth stage, type A - azimuth $\pm 15^\circ$ ....- Load Capacity			
Technical specification		View	
Type	Manual		
Load Capacity	5, 10 kg		
Azimuth range	$\pm 15^\circ$		
Elevation range	$\pm 3^\circ$		
Vertical regular	100 mm		
Grid of M6 holes spaced by 25 mm, on the top plane			
Possibility fix to the optical table series AT and MTAB			
Adapters to height adjustment			
Adapter with picatinny rail			
Adapter to fix devices at 90 degrees			
Dimensions/mass XNASA5:			85 x 525 x 450 mm / 7,5 kg
Dimensions/mass XNASA10			525 x 130 x 550 mm / 13,5 kg

### 4 XNASB

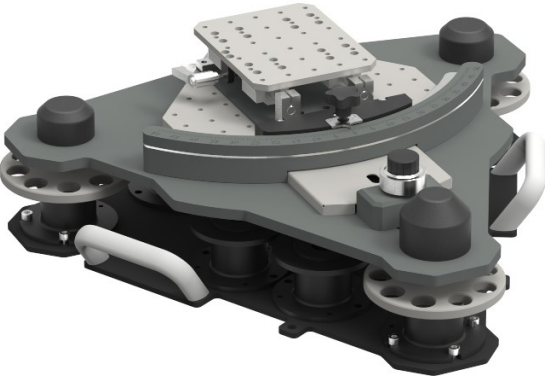
XNASB enables manual non calibrated regulation of angular and vertical regulation of position of small light tested imaging/laser system.

XNASB X - manual narrow azimuth stage, type B ....- Load Capacity		
Technical specification		View
Type	Manual	
Load Capacity	3 kg	
Azimuth range	$\pm 4,5^\circ$	
Elevation range	$\pm 2,5^\circ$	
Vertical regular	$\pm 20$ mm	
Grid of M6 holes spaced by 25 mm, on the top plane		
Adapter to fix devices at 90 degrees		
Adapter with picatinny rail		
Dimensions/mass		400 x 103 x 152 / 4 kg

## Positioning stages

### 5 XWAS

XWAS enables manual regulation of angular and vertical regulation of position of small light tested imaging/laser system in wide angle range.

<b>XWAS</b> X - manual wide azimuth stage, ...- Load Capacity		<b>View</b>
<b>Technical specification</b>		
Type	Manual	
Load Capacity	5 kg	
Azimuth range	$\pm 50^\circ$	
Elevation range	$\pm 3^\circ$	
Vertical regular	100 mm	
Grid of M6 holes spaced by 25 mm, on the top plane		
Adapter to fix devices at 90 degrees		
Adapters to height adjustment		
Adapter with picatinny rail		
Possibility fix to the optical table		
Dimensions/mass	115 x 460 x 500 / 16 kg	

## Positioning stages

### 6 YASA

YASA enables motorized regulation of angular position of tested imaging/laser system.

YASA Y - automatic azimuth stage, type A ...- Load Capacity		View
Technical specification		
Load Capacity	15, 30 kg	
Azimuth range	$\pm 25^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Elevation range	$\pm 8^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Wobble typical	$\pm 0,02^\circ$	
Grid of M6x1 holes spaced by 25 mm, on the top plane		
Possibility fix to the optical table series AT and MTAB		
Adapter to fix devices at 90 degrees		
Dimensions/mass YASA 15	370 x 470 x 310 mm / 26 kg	
Dimensions/mass YASA 30	450 x 650 x 525 mm / 37 kg	

## Positioning stages

### 7 YASB


YASB enables motorized regulation of angular position of tested imaging/laser system.

<b>YASB</b> Y - automatic azimuth stage, type B ...- Load Capacity		
<b>Technical specification</b>		<b>View</b>
Type	Automatic	
Load Capacity	15, 30 kg	
Azimuth range	$\pm 20^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Elevation range	$\pm 25^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Wobble typical	$\pm 0,02^\circ$	
Grid of M6x1 holes spaced by 25 mm, on the top plane		
Possibility fix to the optical table series AT and MTAB		
Adapter to fix devices at 90 degrees		
Dimensions/mass YASB 15	370 x 470 x 310 mm / 31 kg	
Dimensions/mass YASB 30	480 x 650 x 370 mm / 65 kg	

## Positioning stages

### 8 YASC


YASC enables motorized regulation of angular position of tested imaging/laser system.

YASC Y - automatic - azimuth stage, type C ....- Load Capacity		View
Technical specification		
Type	Automatic	
Load Capacity	30 kg	
Azimuth range	$\pm 50^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Elevation range	$\pm 8^\circ$	
Positioning resolution	$0,02^\circ$	
Positioning repeatability	$\pm 0,03^\circ$	
Positioning accuracy	$\pm 0,03^\circ$	
Wobble typical	$\pm 0,02^\circ$	
Grid of M6x1 holes spaced by 25 mm, on the top plane		
Possibility fix to the optical table series AT and MTAB		
Adapter to fix devices at 90 degrees		
Dimensions/mass YASC 30	450 x 650 x 525 mm / 37 kg	

## Positioning stages

### 9 YASD

YASD enables motorized regulation of angular position of tested imaging/laser system.

<b>YASD</b> Y - automatic azimuth stage, type D ....- Load Capacity		
<b>Technical specification</b>		<b>View</b>
Type	Automatic	
Load Capacity	30 kg	
Azimuth range	50°	
Positioning resolution	0,002°	
Positioning repeatability	0,005°	
Positioning accuracy	0,005°	
Elevation range	16°	
Positioning resolution	0,002°	
Positioning repeatability	0,002°	
Positioning accuracy	0,005	
Wobble typical	0,015°	
possibility fix to the optical table series AT and MTAB		
Dimensions/mass YASD 30		



## Positioning stages

### 10 YLS

YLS enables motorized regulation of linear position of tested imaging system (optimized for 2 point NUC of thermal imagers).

YLS .../...			
Y – automatic, LS – Linear stage			
15 / 60 – load Capacity [kg] / linear range [cm]			
Load Capacity	15 kg, 30 kg		
Linear range	30cm, 60cm,	Adapter with Picatinny rail	
Positioning resolution	0,1 mm	Grid of M6x1 holes spaced by 25 mm, on the top plane	
Positioning repeatability	±0,15 mm	Adapter to fix devices at 90 degrees	
Positioning accuracy	±0,15 mm	Possibility fix to the optical table series AT	
Travel speed	Slow: 100 mm/s Medium: 150 mm/s Fast: 200 mm/s	Dimensions/mass: <b>YLP 15 60</b>	135x1050x486mm / 19kg
		Dimensions/mass: <b>YLP 30 60</b>	
		Dimensions/mass: <b>YLP 15 30</b>	135x750x486mm / 12kg
		Dimensions/mass: <b>YLP 30 30</b>	
