

Ezi-Robo[®]

Actuator series Driven by Ezi-SERVO

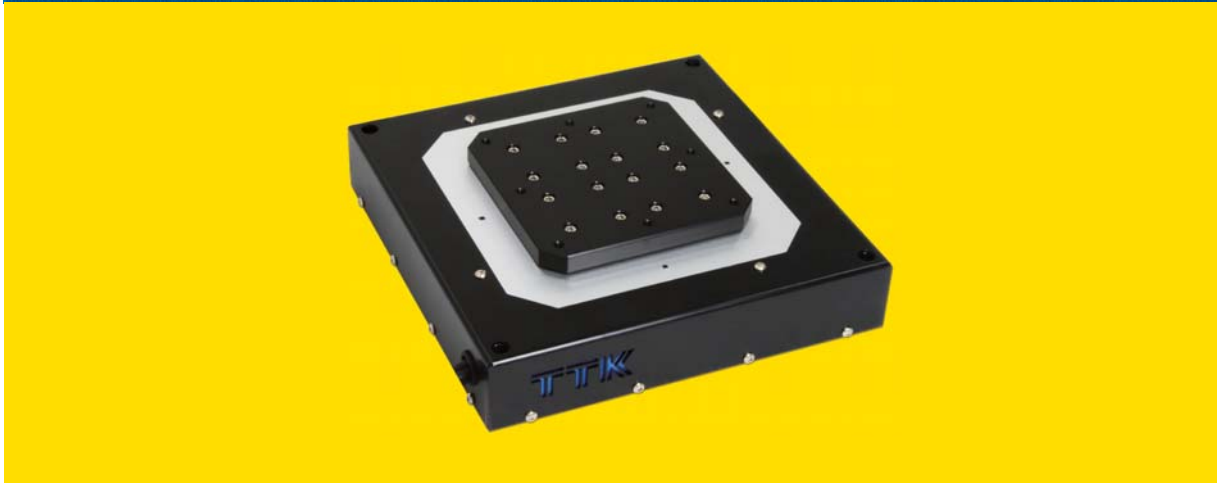
- Customization solution supports special requests from customer (Motor integrated XYθ Stage / Rectangle Structure Stage etc)
- Provide DLL Library for PC (Windows) Interface
- Convenient Individual Axis detachability enables adjustment and repair
- Position Accuracy Improvement than conventional 5 phase stepping motor by Ezi-SERVO Adoption

MAS

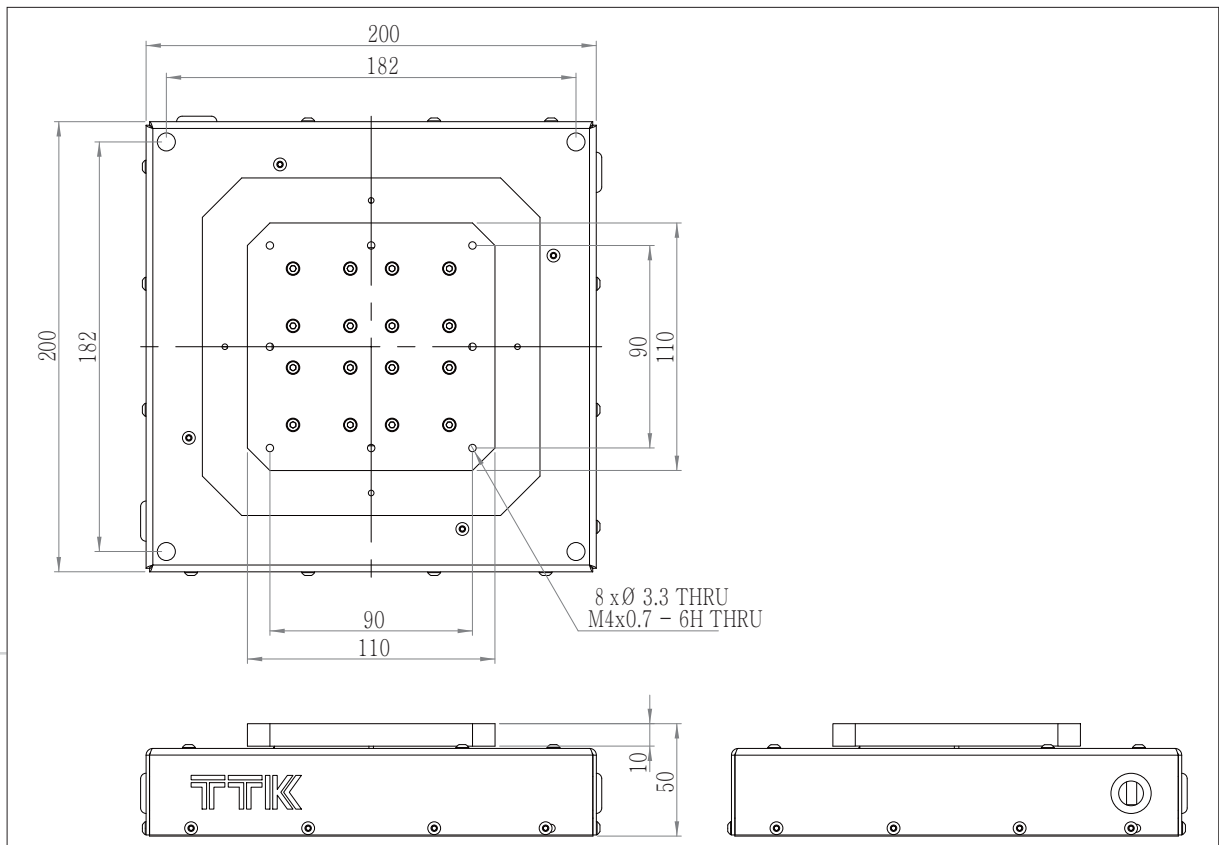


● Motor integrated UVW Alignment Stage (TAS-110)

Table Size : 110 x 110



■ Ezi-Robo-MAS-PR-MI-28L-D-TAS-110



● Main Features

- 28mm Motor 3 Axes integrated UVW Stage
- Slim stage (Height : 50mm)
- Suitable to use under Waterproof and Dustproof environment
- Convenient Individual Axis detachability enables adjustment and repair
- Maximize convenience for installation and convenience of usage by space minimization
- High Rigidity, High resolution ball screw, bearing and cross guide applied High performance of stage

● Specification

Model Number	Ezi-Robo-MAS-PR-MI-28L-D-TAS-110
Surface Size	110 x 110 [mm]
Travel Range	±5 [mm] / ±5 [mm] / ±11,8 [°]
Travel Guide	Crossed Roller Guide
Resolution*1	0,1 [μm]
Applicable Ball Screw	Ball Screw Φ8 [mm] Lead 1 [mm]
Max. Speed*2	20 [mm/sec]
Accuracy	5 [μm]
Repeatability	±3 [μm]
Load Capacity	10 [Kgf]
Parallelism	30 [μm]
Straightness	15 [μm]
Weight	3,5 [Kg]
Material	Aluminum
Motor	EzM-28L-D (Encoder Resolution 16,000[ppr])
Cautions	*1 Specification based on EzM-28L-D Motor resolution as 10,000[Step/rev]. *2 Max. speed is 200[kpps] under EzM-28L-D Motor resolution as 10,000[Step/rev]. Please be careful not to set operation speed over Max. speed 200[kpps].

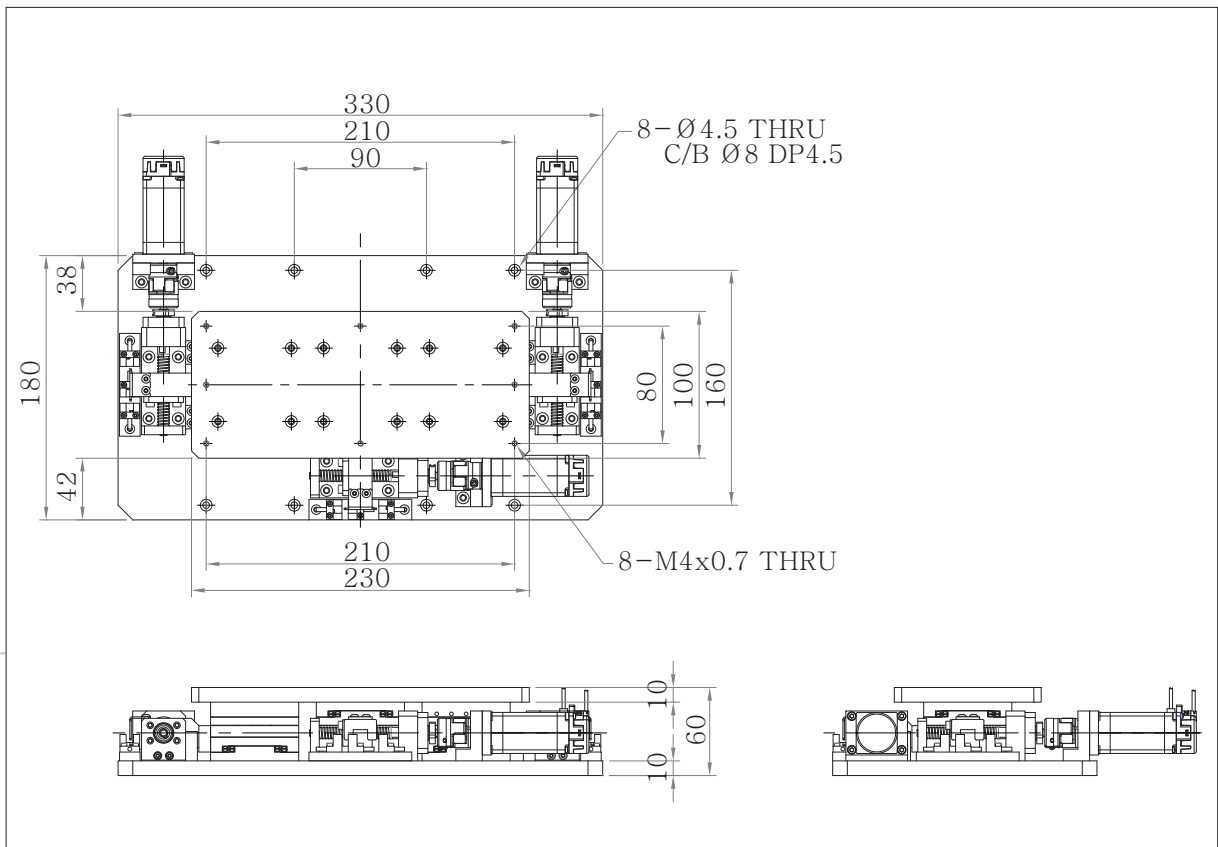
● Applications

- Mini substrate alignment measurement and bonding for LCD or OLED etc
- Mark Alignment of Screen printing
- Probe Inspection Machine
- Circular Glass Cutting Process
- Optical equipment, Medical Instrument, Bio Device Alignment and Evaluation

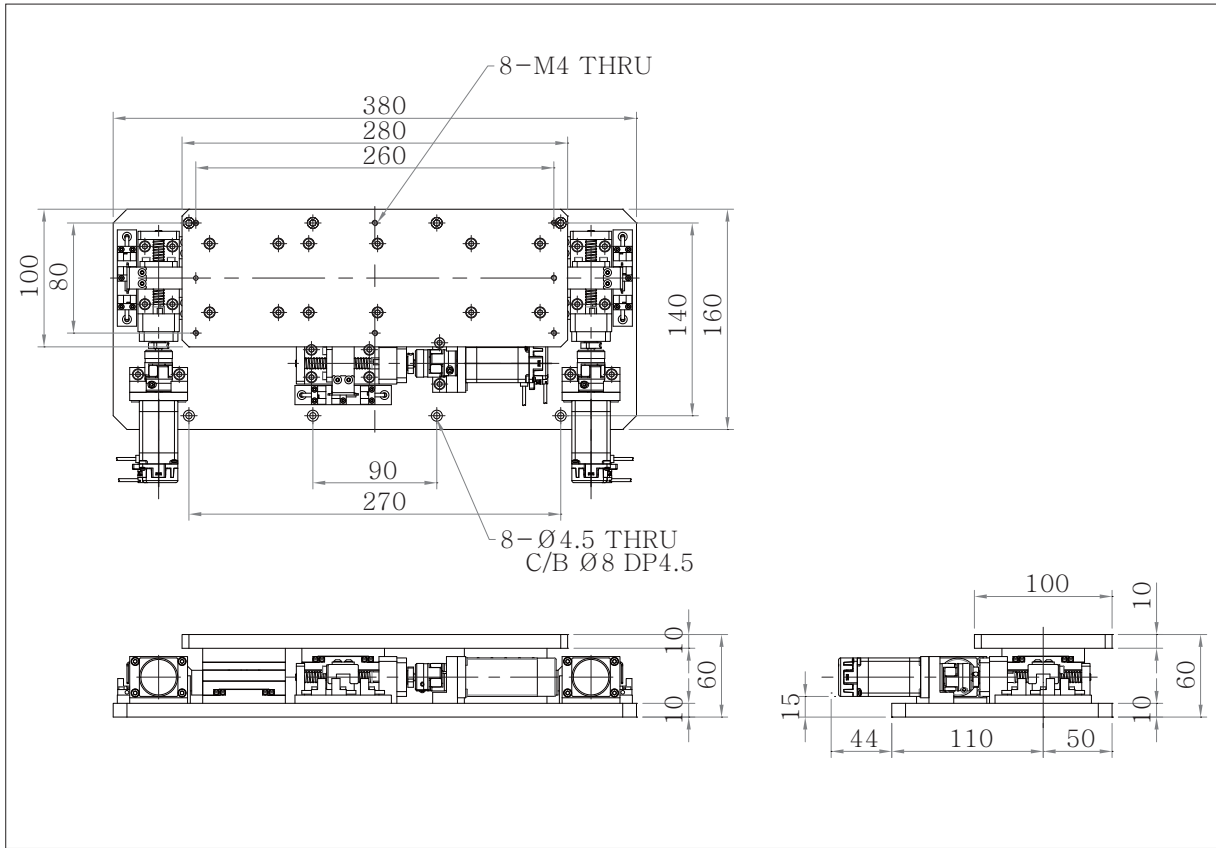
● Rectangle Table Alignment Stage (TAS-100A, TAS-100B)
 Table Size : 100 x 230, 100 x 280



■ Ezi-Robo-MAS-PR-MI-28L-D-TAS-100A



■ Ezi-Robo-MAS-PR-MI-28L-D-TAS-100B



● Main Features

- 28mm Motor 3 Axes applied Slim UVW Stage (Height : 60mm)
- Stage upper plate applies rentangle structure (100x230mm, 100x280mm)
- Convenient Individual Axis detachability enables adjustment and repair
- Maximize convenience for installation and convenience of usage by space minimization
- High Rigidity, High resolution ball screw, bearing and cross guide applied High performance of stage

● Specification

Model Number	Ezi-Robo-MAS-PR-MI-28L-D-TAS-100A	Ezi-Robo-MAS-PR-MI-28L-D-TAS-100B
Surface Size	230 x 100 [mm]	280 x 100 [mm]
Travel Range	±5 [mm] / ±5 [mm] / ±3.9 [°]	±5 [mm] / ±5 [mm] / ±2.9 [°]
Travel Guide	Crossed Roller Guide	
Resolution*1	0.1 [μm]	
Applicable Ball Screw	Ball Screw φ8 [mm] Lead 1 [mm]	
Max. Speed*2	20 [mm/sec]	
Accuracy	5 [μm]	
Repeatability	±3 [μm]	
Load Capacity	30 [Kgf]	
Parallelism	30 [μm]	
Straightness	10 [μm]	
Weight	4.8 [Kg]	4.9 [Kg]
Material	Aluminum	
Motor	EzM-28L-D (Encoder Resolution 16,000[ppr])	
Cautions	*1 Specification based on EzM-28L-D Motor resolution as 10,000[Step/rev]. *2 Max. speed is 200[kpps] under EzM-28L-D Motor resolution as 10,000[Step/rev]. Please be careful not to set operation speed over Max. speed 200[kpps].	

● Applications

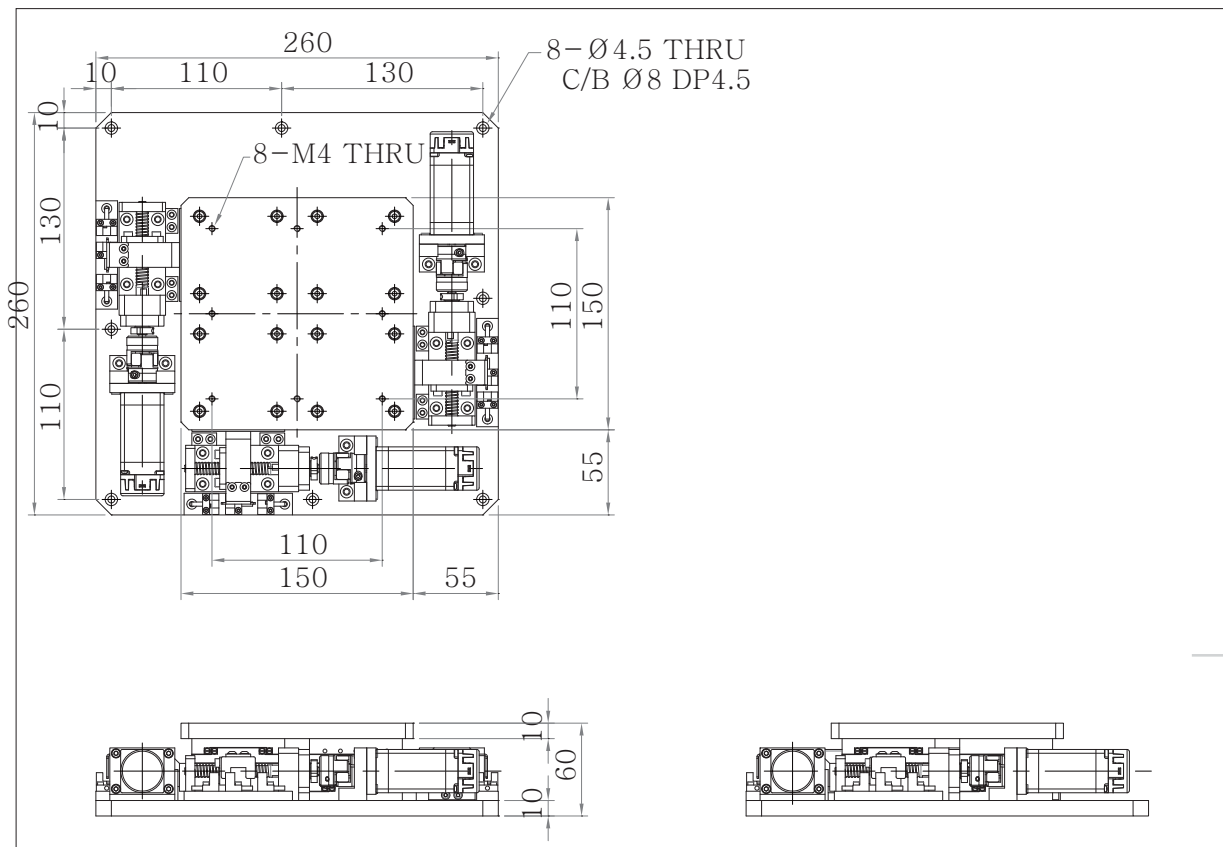
- Tablet PC Panel or Covers Alignment
- Mini substrate alignment measurement and bonding for LCD or OLED etc
- Mark Alignment of Screen printing
- Probe Inspection Machine
- Circular Glass Cutting Process
- Camera Module Alignment
- Optical equipment, Medical Instrument, Bio Device Alignment and Evaluation

● Slim Type UVW Alignment Stage (TAS-150)

Table Size : 150 x 150



■ Ezi-Robo-MAS-PR-MI-28L-D-TAS-150



● Main Features

- 28mm Motor 3 Axes applied Slim UVW Stage (Height : 60mm)
- Flexible Modular Stage supports Min. 150 x 150[mm], Max. 300 x 300[mm]
- Realization of Bottom Plate Minimization
- High precision XYθ Stage with high capacity side-direction bearing
- Convenient Individual Axis detachability enables adjustment and repair
- High Rigidity, High resolution ball screw, bearing and cross guide applied High performance of stage

● Specification

Model Number	Ezi-Robo-MAS-PR-MI-28L-D-TAS-150
Surface Size	150 x 150 [mm]
Travel Range	±5 [mm] / ±5 [mm] / ±7.1 [°]
Travel Guide	Crossed Roller Guide
Resolution*1	0.1 [μm]
Applicable Ball Screw	Ball Screw Φ8 [mm] Lead 1 [mm]
Max. Speed*2	20 [mm/sec]
Accuracy	5 [μm]
Repeatability	±3 [μm]
Load Capacity	45 [Kgf]
Parallelism	30 [μm]
Straightness	15 [μm]
Weight	5.2 [Kg]
Material	Aluminum
Motor	EzM-28L-D (Encoder Resolution 16,000[ppr])
Cautions	*1 Specification based on EzM-28L-D Motor resolution as 10,000[Step/rev]. *2 Max. speed is 200[kpps] under EzM-28L-D Motor resolution as 10,000[Step/rev]. Please be careful not to set operation speed over Max. speed 200[kpps].

● Applications

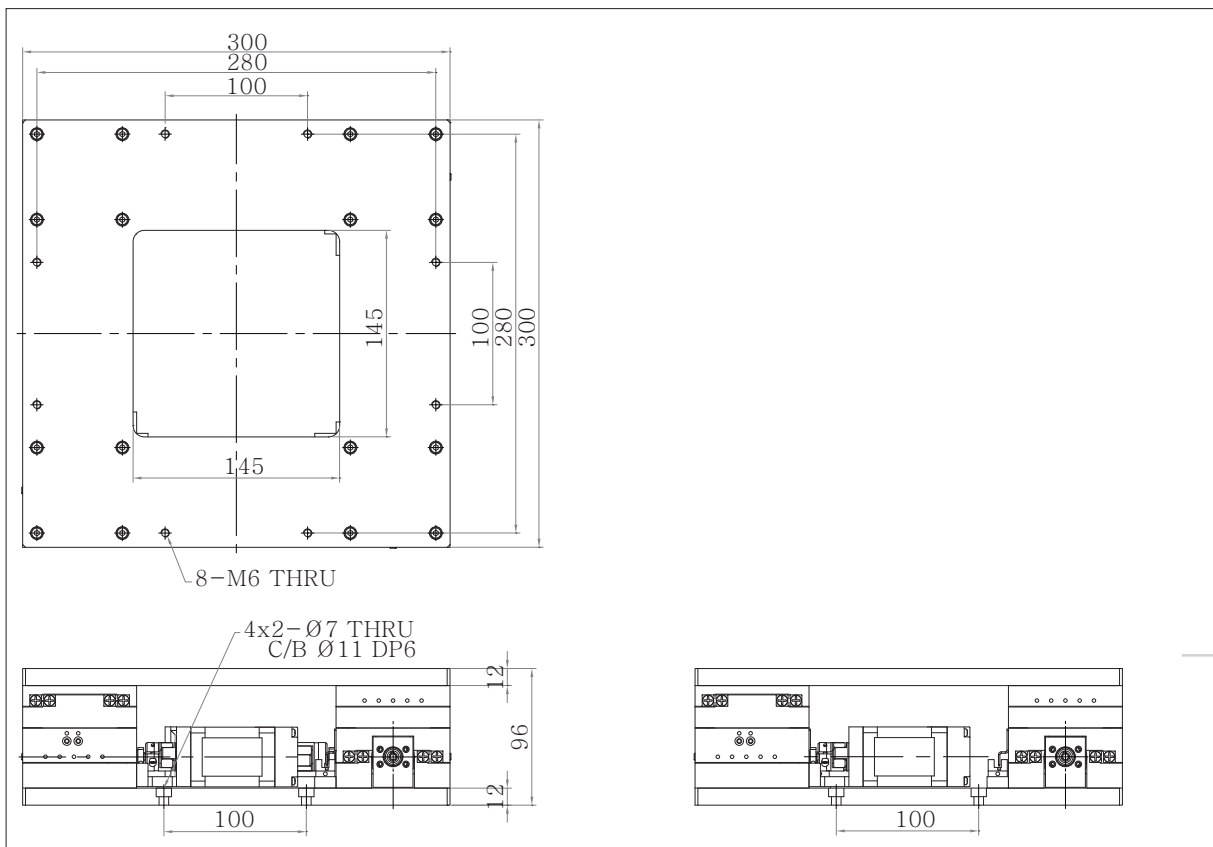
- Mini substrate alignment measurement and bonding for LCD or OLED etc
- Mark Alignment of Screen printing
- Probe Inspection Machine
- Circular Glass Cutting Process
- Camera Module Alignment
- Optical equipment, Medical Instrument, Bio Device Alignment and Evaluation

● Motor integrated large stage (TAS-300)

Table Size : 300 x 300



■ Ezi-Robo-MAS-PR-MI-42XL-A-TAS-300



● 주요특징

- Precise customization serviceable stage under various size
- 42mm Motor 3 Axes integrated stage
- Center hole space maximized stage
- High precision XYθ Stage with high capacity side-direction bearing
- Convenient Individual Axis detachability enables adjustment and repair
- High Rigidity, High resolution ball screw, bearing and cross guide applied High performance of stage

● Main Features

Model Number	Ezi-Robo-MAS-PR-MI-42XL-A-TAS-300
Surface Size	300 x 300 [mm]
Travel Range	±10 [mm] / ±10 [mm] / ±4.9 [°]
Travel Guide	Crossed Roller Guide
Resolution*1	0,1 [μm]
Applicable Ball Screw	Ball Screw Ø8 [mm] Lead 1 [mm]
Max. Speed*2	20 [mm/sec]
Accuracy	5 [μm]
Repeatability	±3 [μm]
Load Capacity	80 [Kgf]
Parallelism	30 [μm]
Straightness	15 [μm]
Weight	10 [Kg]
Material	Aluminum
Motor	EzM-42XL-A (Encoder Resolution 10,000[ppr])
Cautions	*1 Specification based on EzM-28L-D Motor resolution as 10,000[Step/rev]. *2 Max. speed is 200[kpps] under EzM-28L-D Motor resolution as 10,000[Step/rev]. Please be careful not to set operation speed over Max. speed 200[kpps].

● Applications

- Mini substrate alignment measurement and bonding for LCD or OLED etc
- Mark Alignment of Screen printing
- Probe Inspection Machine
- Circular Glass Cutting Process
- Camera Module Alignment
- Optical equipment, Medical Instrument, Bio Device Alignment and Evaluation

● Optimized Ezi-SERVO Plus R series for PC based Alignment System Structure



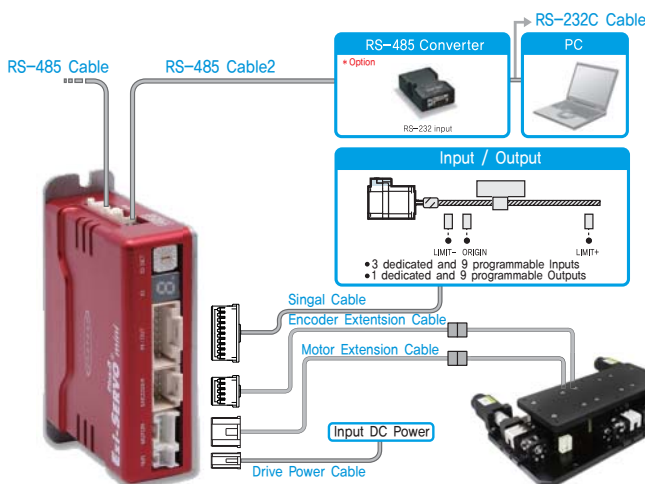
- Provide DLL Library for PC (Windows) Interface
- Positioning Control by RS-485 Network (Controller Embedded)
- PR-MI Type (controller embedded, Mini type) and ST-MI Type (Pulse input type, Mini type) is selectable
- Non-use of Motion Board simplify operation, reduce cost and wiring

● Maximize convenience for Multi-axes stage structure, S-SERVO-2X/3X Series



- S-SERVO-2X, 3X Series provides convenience of control for multi-axes structure as 2 Axes, 3 Axes, 4 Axes etc.
- Cost Reduction Effect by multi axes control system
- Perfect replacement of 5 phase step motor using as standard motor for conventional stage
- Load dependant current control function enables to minimize motor temperature and cope with external sudden load variation onto upper plate of stage
- Boost current (Max. 150%) enables improvement of Acceleration and Decelarion characteristic and generation of high torque

● System Configuration



● Applicable Product Line-up

Products	Specifications
Ezi-SERVO-PR-MI	Controller Embedded, Mini Type
Ezi-SERVO-ST-MI	Pulse Input Type, Mini Type
S-SERVO ST	Pulse Input Type
S-SERVO 2X, 3X	Pulse Input Type, Multi Axes Type

● Parts

- Power Connector
- Signal Connector
- Encoer Connector
- Motor Connector



Fast, Accurate, Smooth Motion

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