Piezo Motor Servo Controller

Features

■ Multi-channel servo control for PMNL piezo motor

■ Modular design, flexible options of drive channels

■ Support incremental/absolute linear scale

■ Digital communication control

Description

Digital multi-channel piezo motor servo controller

Channels from 2 to 4 are available as request, supporting high-performance closed-loop servo control for PMNL series piezo motors of Yinguan Company, and provide multiple motor control modes, including full-step mode, analog drive mode, closed-loop control mode.

High precise sensor interface

The controller provides high precise linear scale signal input interface, supports incremental ABZ type and absolute Biss-C type.
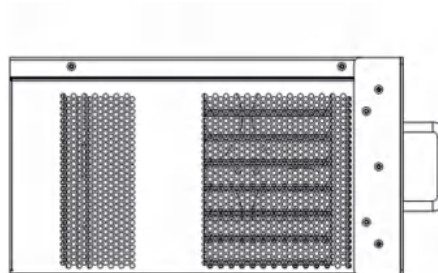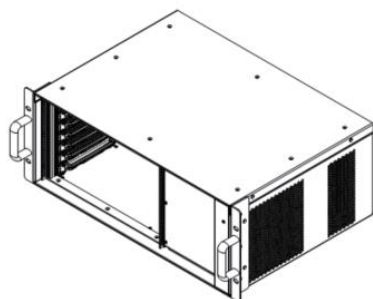
Digital communication control

The controller provides RS-485 communication interface, supports Modbus RTU protocol, and the efficient and multi-function command set can meet the high-performance motion control of piezo motors and real-time monitoring of the driver status.
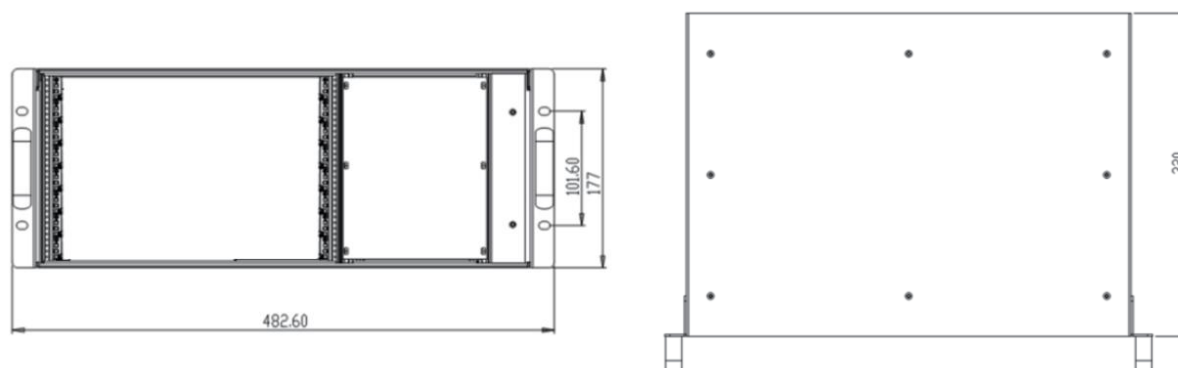
Applications

■ Lens precision adjustment

■ Precision electron microscope adjustment

■ Precision semiconductor equipment

■ Precision medical testing equipment

Interface Definition

Interface Definition(Continued from previous page)

Applicable model：B-542.3B, B-542.3C, B-543.3B, B-543.3C, B-544.3B, B-544.3C　　Unit：mm

Technical Specifications

Basics	B-54x.3B	B-54x.3C	Unit
Function	multi-channel piezo motor servo controller，linear scale closed loop		
Motor Channels	2~4		
Output voltage	-250~ +250		V
Peak power / channel	45		W
Average output power / channel	15		W
Peak current / channel	180		mA
Average output current / channel	60		mA
Interfaces and operations			
Communication interface	RS-485 / Modbus RTU		
Motor interface	HD-15（Female）		
Sensor interface	DB-15（Female）		
Sensor type	Incremental (ABZ)	Absolute (BiSS C)	
Command set	Modbus command set		
Support function	point-to-point motion		
Miscellaneous			
Operating voltage	AC 220		V
Maximum power consumption	280		W
Operating temperature range	5~50		°C
Dimensions	482.6 × 88.1 × 295.5		mm×mm×mm
Net weight	12		Kg

Customization Information

B-54x series piezo motor servo controller

Type	Feature
B-542.3B	2-channel PMNL piezo motor servo controller, 4U chassis, incremental linear scale closed loop, RS-485
B-542.3C	2-channel PMNL piezo motor servo controller, 4U chassis, absolute linear scale closed loop, RS-485
B-543.3B	3-channel PMNL piezo motor servo controller, 4U chassis, incremental linear scale closed loop, RS-485
B-543.3C	3-channel PMNL piezo motor servo controller, 4U chassis, absolute linear scale closed loop, RS-485
B-544.3B	4-channel PMNL piezo motor servo controller, 4U chassis, incremental linear scale closed loop, RS-485
B-544.3C	4-channel PMNL piezo motor servo controller, 4U chassis, absolute linear scale closed loop, RS-485