

MN-SERVO-MJ3 / MN-SERVO-PA4
MN-SERVO-YSV / MN-SERVO-DAA

Distributed Motionnet Single-axis Motion Control Modules
(With Spring Type Terminal Blocks)

Features

- Maximum communication speed: 20 Mbps
- Pulse Output Rate: 6.6 MHz (Max.)
- Control up to 64 axes per line
- Multi-axis linear interpolation function
- 2-axis circular interpolation function
- T/S-curve acceleration and deceleration
- Change speed and position on the fly
- Slow down sensor, home sensor, positive and negative limit sensors for each axis
- Software limit and compare trigger output
- Three-way isolation for power, communication and I/O. (Provide better noise immunity and device protection)
- The standard module equipped with Terminal Blocks for easy wiring (additional terminal board is not required)

Introduction

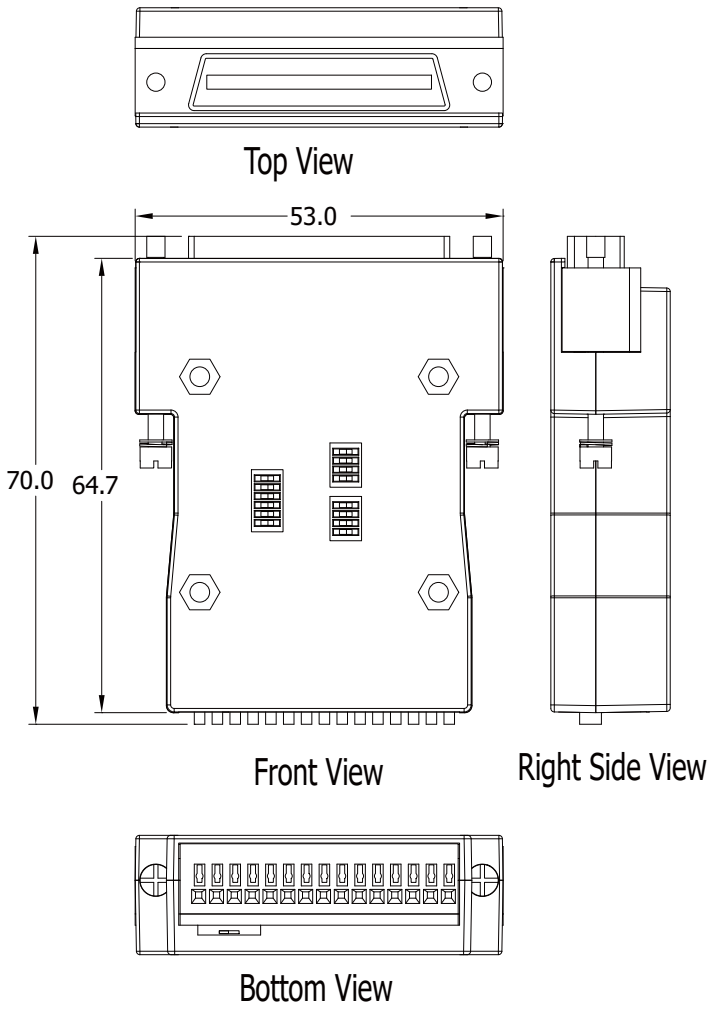
The **MN-SERVO** series is used to expand the number of axes for distributed motion control in Motionnet field bus. These extension slave modules can be directly plugged into the servo driver and being connected serially to the controller by a simple and affordable Cat.5 LAN cable, reducing the wiring effort between drivers and controller. This is very suitable for highly integrated machine automation applications. After the module is plugged into the servo driver, all you need to do is make the serial LAN cable connect between the modules. One serial line can support up to 64 single-axis modules. ICP DAS provides a variety of motion control modules suitable for a range of brands of servo drivers, such as Mitsubishi MELSERVO-J3/J4, Yaskawa Sigma II/III/V, Panasonic MINAS A4/A5, Delta ASDA-A/A2 and Teco TSTA-A/A+.

Specifications

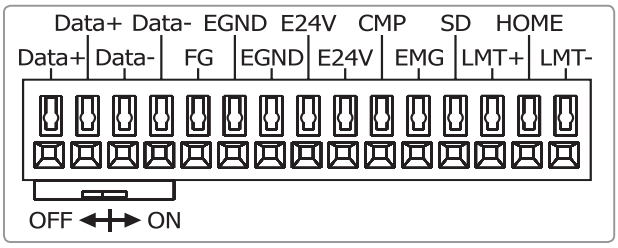
Model	MN-SERVO-MJ3	MN-SERVO-PA4	MN-SERVO-YSV	MN-SERVO-DAA
General				
Communication Speed	2.5, 5, 10, 20 Mbps			
Pulse Output Rate	6.6 MHz (Max.)			
Pulse Output Interface	OUT/DIR, CW/CCW			
Pulse Output Counter	28-bit			
Encoder Interface	CW/CCW, A/B phase			
Encoder Counter	28-bit			
Speed Profile	Trapezoidal/S Shaped Acc/Dec Driving			
Home Mode	13 Types			
Mechanical Switch Input	LMT+, LMT-, HOME, SD, EMG			
Servo I/O Interface	Input: ALM, RDY, INP Output: SVON, ERC, ALM_RST			
High-Speed Position Compare Output	5 V TTL or 24 V open collector			
LED Diagnostics	Communication state (Link, Error) Mechanic Switch Input Internal 3.3 V Power Termination Resistor Switch			
Environmental				
Operating Temperature	0 ~ +60 °C			
Storage Temperature	-20 ~ +80 °C			
Operating Humidity	10 ~ 85%; non-condensing			
Storage Humidity	5 ~ 95%; non-condensing			

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Dimensions: (Units: mm)



Pin Assignments



No.	Name	Description	Signal Direction
1 ~ 2	Data+	Serial communication data+	Both
3 ~ 4	Data-	Serial communication data-	Both
5	FG	Frame ground	None
6 ~ 7	EGND	External ground	Input
8 ~ 9	E24V	External power 24V	Input
10	CMP	High-speed position compare	Output
11	EMG	Emergency stop	Input
12	SD	Slowdown	Input
13	LMT+	Positive end limit	Input
14	HOME	Home position	Input
15	LMT-	Negative end limit	Input

Wire Range: 28~20 AWG
Wire Strip Length: 10 mm

Ordering Information

MN-SERVO-MJ3 CR	Distributed Motionnet Single-axis Motion Control Module with Spring Type Terminal Blocks for Mitsubishi MELSERVO-J3/J4 (RoHS)
MN-SERVO-PA4 CR	Distributed Motionnet Single-axis Motion Control Module with Spring Type Terminal Blocks for Panasonic MINAS A4 (RoHS)
MN-SERVO-YSV CR	Distributed Motionnet Single-axis Motion Control Module with Spring Type Terminal Blocks for Yaskawa Sigma II/III/V (RoHS)
MN-SERVO-DAA CR	Distributed Motionnet Single-axis Motion Control Module with Spring Type Terminal Blocks for Delta ASDA-A/A2 (RoHS)

Related Products

PISO-MN200(T/EC) CR	PCI Bus, Dual-line Motionnet Master Card (RoHS)
MN-SERVO-xxx-EC Series CR	Distributed Motionnet Single-axis Motion Control Modules (MJ3 / PA4 / YSV / DAA) (RoHS)
MN-2091U(-T) CR	Distributed Motionnet Single-axis Universal Motion Control Module (RoHS)
MN-MP4U-DIN CR	Distributed Motionnet Four-axis Universal Motion Control Module (RoHS)
MN-3254(T) CR / MN-D622-DIN CR	Distributed Motionnet 16-ch Isolated DI 16-ch Isolated DO Module (RoHS)
MN-3253(T) CR / MN-D640-DIN CR	Distributed Motionnet 32-ch Isolated DI Module (RoHS)
MN-3257(T) CR / MN-D604-DIN CR	Distributed Motionnet 32-ch Isolated DO Module (RoHS)
MN-AD8-DIN CR	Distributed Motionnet 8-ch Analog Input Module (RoHS)
MN-DA2-DIN CR	Distributed Motionnet 2-ch Analog Output Module (RoHS)
MN-HUB4(EC) CR	Distributed Motionnet 4 Port Hub Module (RoHS)

Accessories

4POPP-003F	Pink Cord-End Terminal	
4POPP-003G	Turquoise Cord-End Terminal	

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