



## MN-AD8-DIN

Distributed Motionnet 8-ch Analog Input Module

### Features

- 8 +/- 10 V analog input
- RJ-45 communication port
- 2 way isolation on power, communication
- Tiny design(90×75×57mm), DIN rail compatible
- 16-bit high resolution, 0.3mV min
- High precision and low shift reference 5V inside
- Hardware offset, gain calibration to EEPROM storage
- Rapid A/D transference. Sampling rate = 250 ksps



### Introduction

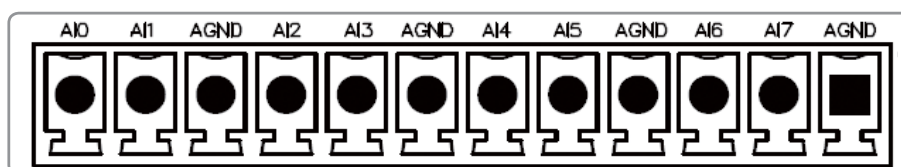
**MN-AD8-DIN** is a Motionnet 8-channel analog input I/O module. The max device capacity can be loaded 64 I/O modules on each Motionnet communication port. Thus, each port can be expended into 512 analog input points at once. The communication latency between two devices is 15.1μsec so that the max communication latency with 64 I/O modules on one communication port is 0.97 ms. The I/O connection status update is automated and real-time by hardware without occupied CPU time. The 16 bit high precision resolution analog input is provided +/- 10V range, 5V reference voltage with low shift, and hardware calibration in offset and gain for easy usage to customers.

### Specifications

Model	MN-AD8-DIN
<b>Analog Input</b>	
Input Channels	8
Voltage Level	+/- 10 V
Sampling Frequency	250 k sps
Calibration Function	Offset: provided by hardware Gain: provided by hardware
<b>Interface</b>	
LED Indicators	Communication stats(Link, Error) Internal 3.3 V Power Terminal resistor switch
Communication Speed	Selectable 2.5, 5, 10 or 20 Mbps by DIP Switch
Cyclic Scan Time	15.1 μs per device (20 Mbps)

Model	MN-AD8-DIN
<b>Power</b>	
Voltage Range	24VDC +/-5% (1000 V isolated)
Power Consumption	3W max
Protection	Reverse voltage and overcurrent protection
Connection	5-Pin removable terminal block
<b>Mechanical</b>	
Case	Plastic
Flammability	UL 94V-0 housing
Dimensions	75mm x 90mm x 57 mm (W x L x H)
Installation	DIN-Rail Mounting
<b>Environmental</b>	
Operating Temperature	0 ~ + 60°C
Storage Temperature	-20 ~ +80°C
Operating Humidity	10 ~ 85%; Non-condensing
Storage Humidity	5 ~ 95%; Non-condensing

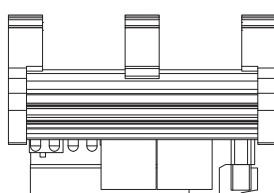
## Pin Assignments



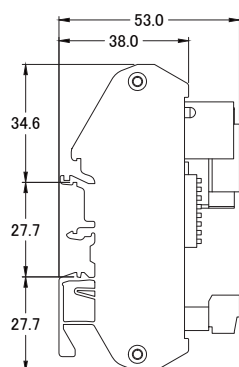
NO.	Name	Specifications	Signal Direction
CN2 Pin Assignments			
12	AI0	Analog input channels 0	Input
11	AI1	Analog input channels 1	Input
10	AGND	Analog Ground	Input
9	AI2	Analog input channels 2	Input
8	AI3	Analog input channels 3	Input
7	AGND	Analog Ground	Input

NO.	Name	Specifications	Signal Direction
CN2 Pin Assignments			
6	AI4	Analog input channels 4	Input
5	AI5	Analog input channels 5	Input
4	AGND	Analog Ground	Input
3	AI6	Analog input channels 6	Input
2	AI7	Analog input channels 7	Input
1	AGND	Analog Ground	Input

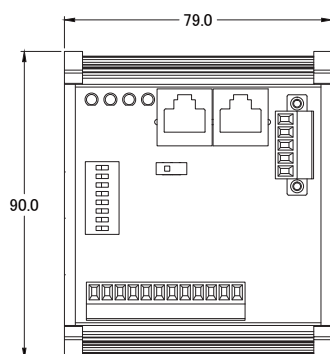
## Dimensions: (Units: mm)



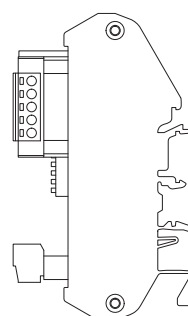
Top View



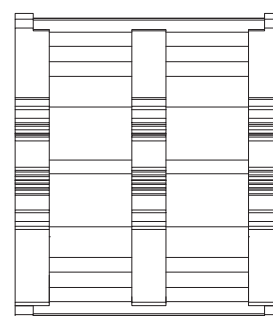
Left Side View



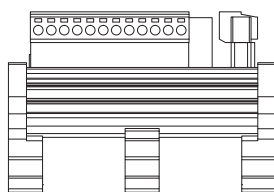
Front View



Right Side View



Rear View



Bottom View

Unit: mm

## Ordering Information

<b>MN-AD8-DIN CR</b>	Distributed Motionnet 8-ch Analog Input Module (RoHS)
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## Related Products

PISO-MN200(T/EC) CR	PCI Bus, Dual-Line Motionnet Master Control Card (RoHS)
MN-SERVO Series CR MN-SERVO -EC Series CR	Distributed Motionnet Single-axis Motion Control Modules (with Spring Type Terminal Blocks; EC: with e-CON Mini-Clamp Connector) (RoHS)
MN-2091U CR MN-2091U-T CR	Distributed Motionnet Single-axis Universal Motion Control Module (RoHS)