



■ Dual channel +/- 10 V analog output ■ 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 ■ Software calibration of offset/gain ■ Rapid output rate, Slew rate = 20 V / us ■ High precision, DNL = +/-1 LSB, INL = +/-3 LSB

(E) FC KOHS

MN-DA2-DIN

Distributed Motionnet 2-ch Analog Output Module

Introduction

MN-DA2-DIN is a Motionnet 2-channel analog output 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 128 analog output 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 output is provided +/- 10V range, 5V reference voltage with low shift, and hardware calibration in offset and gain for easy usage to customers.

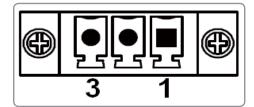
Specifications

Model	MN-DA2-DIN		
Analog Output			
Output Channels	2		
Voltage Level	+/- 10 V		
Load Current	+/- 20 mA Max per channel		
Response Speed	Slew rate = 20 V / us		
Output Accuracy	DNL = +/- 1 LSB INL = +/- 3 LSB		
Calibration Function	Offset: provided by software Gain: provided by software		
Interface			
LED Indicators	Communication stats(Link, Error) Internal 3.3 V Power Terminal resistor rwitch		
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-DA2-DIN	
Power		
Voltage Range	24VDC +/-5% (1000 V isolated)	
Power Consumption	3W max	
Protection	Reverse voltage and overcurrent protection	
Connection	5-Pin removable terminal block	
Mechanical		
Case	Plastic	
Flammability	UL 94V-0 housing	
Dimensions	75mm x 90mm x 57 mm (W x L x H)	
Installation	DIN-Rail Mounting	
Environmental		
Operating Temperature	0 ~ + 60°C	
Storage Temperature	-20 ∼ +80°C	
Operating Humidity	10 ~ 85%; Non-condensing	
Storage Humidity	5 ~ 95%; Non-condensing	

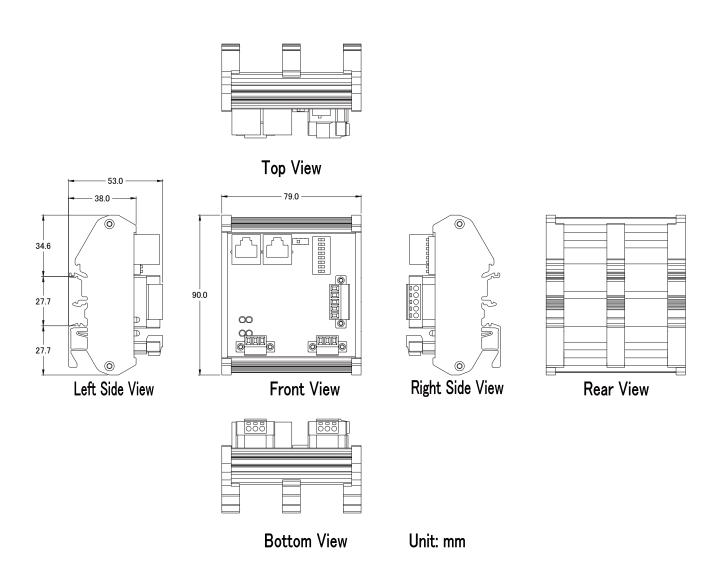
ICP DAS CO., LTD Website: http://www.icpdas.com Vol.2019.05 1/2

■ Pin Assignments



NO.	Name	Specifications	Signal Direction	
CN2-CN3 Pin Assignments				
1	FGND	Frame Ground	None	
2	AGND	Analog Ground	Output	
3	AOx	Analog Output	Output	

■ Dimensions: (Units: mm)



Ordering Information

MN-DA2-DIN CR	DIN CR Distributed Motionnet 2-ch Analog Output Module (RoHS)	
■ 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)	

ICP DAS CO., LTD Website: http://www.icpdas.com Vol.2019.05 2/2