

MN-3254

Distributed Motionnet 16-Input, 16-Output I/O Module



Features:

- Maximum communication speed: 20 Mbps
- 16 isolated digital inputs
16 isolated digital outputs
- Each Motionnet transfer port: connect modules up to 64
- Designing isolation protection: power, communication, I/O
- LED diagnostic for communication and I/O status
- Two input ports (One port = 8 bits)
Each port can be specified as NPN or PNP (12~24 V)
- Two output ports (One port = 8 bits)
The internal flywheel diode of each output ports can be connect to different sources of power individually.
- High current sinking capability (200 mA)

4

2

Remote Motion Solutions

Introduction:

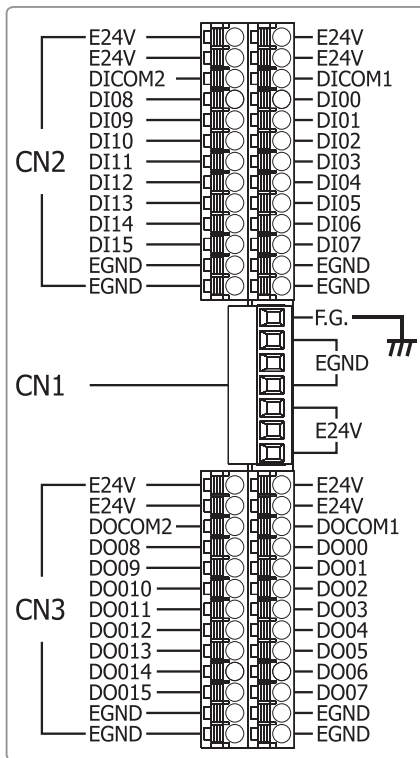
The **MN-3254** is an I/O expansion device for the Motionnet system. It is equipped with 16 isolated digital inputs and 16 isolated digital outputs. Each Motionnet communication line can connect up to 64 modules, and therefore it's I/O can be expanded up to 1024 inputs and 1024 outputs. The communication time required for each MN-3254 is 15.1 us. If 64 modules have been connected, it can send and receive signals for 2048 points on 64 modules in 0.97msec. The update of I/O status is completed automatically through Motionnet system in constant interval, and setting interrupts for specific input points which customer want to monitor can avoid wasting CPU time polling repetitively when there is nothing else for the issuing process to do. The I/O points are divided into two input ports and two output ports (One port = 8 bits). Each input port can be specified as NPN or PNP (12~24V), and the internal flywheel diodes of each output port can be connected to different sources of power individually.

Specifications:

Digital Output	
Output Channel	16
Output Type	Open Collector (Sink), with internal flywheel diode
Load Voltage	+30 VDC max.
Load Current	200 mA max. for each channel
Isolation Voltage	3000 Vrms
Digital Input	
Input Channel	16
Input Type	Sink/Source (NPN/PNP)
On Voltage Level	+10 ~ 30 VDC
Off Voltage Level	+3 VDC max.
Input Impedance	4.7K Ohm
Isolation Voltage	3000 Vrms
Interface	
LED Indicator	Communication state(Link, Error) Input/output state Internal 3.3 V Power Termination resistor switch
Communication Speed	Selectable 2.5, 5, 10 or 20 Mbps by DIP Switch.

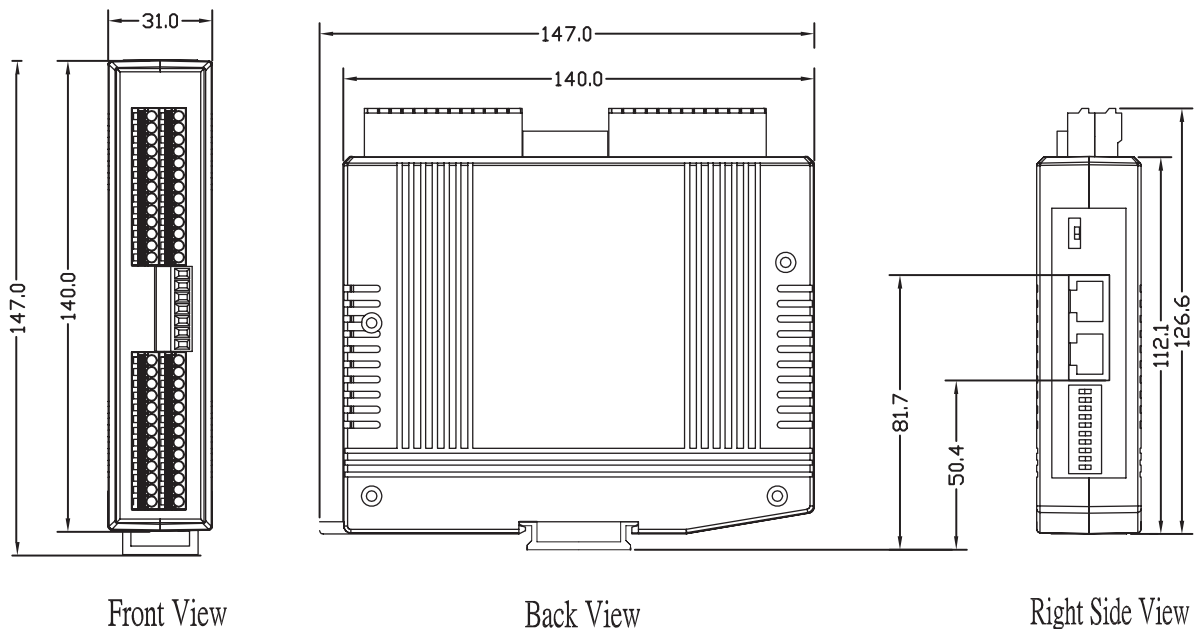
Cyclic scan time	15.1 μ s per device (20 Mbps)
Connection	Communication: RJ-45 connector x2 I/O: 13-Pin pluggable Terminal block x4
Power	
Voltage Range	24 VDC (1000 V isolated)
Power Consumption	2 W max.
Protection	reverse voltage and overcurrent protection
Connection	7-Pin Removable Terminal Block
Mechanical	
Case	Plastic
Flammability	UL94V-0 materials
Dimensions (W x H x D)	31 mm x 140 mm x 126.6 mm
Installation	DIN-rail mounting
Environment	
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.	Pin Define	Specifications	I/O Define
CN1 Pin Assignments			
1	FG	Frame Ground	-
2 ~ 4	EGND	External Ground	Input
5 ~ 7	E24V	External 24V(+)	Input
CN2A (Right) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	connect to CN1
3	DICOM1	Common terminal of DI00~DI07	Input
4 ~ 11	DI00~DI07	Digital input channels 00~07	Input
12~13	EGND	External Ground	connect to CN1
CN2B (Left) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	connect to CN1
3	DICOM2	Common terminal of DI08~DI15	Input
4 ~ 11	DI08~DI15	Digital input channels 08~15	Input
12~13	EGND	External Ground	connect to CN1
CN3A (Right) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	connect to CN1
3	DOCOM1	Common Anode for Flywheel Diodes of DO00~DO07	Input
4 ~ 11	DO00~DO07	Digital output channels 00~07	Output
12~13	EGND	External Ground	connect to CN1
CN3B (Left) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	connect to CN1
3	DOCOM2	Common Anode for Flywheel Diodes of DO08~DO15	Input
4 ~ 11	DO08~DO15	Digital output channels 08~15	Output
12~13	EGND	External Ground	connect to CN1

Dimensions: (Unit : mm)



Ordering Information/Accessories:

Model No.	Product Description
MN-3254	Distributed Motionnet 16-Input, 16-Output I/O Module
PISO-MN200	PCI Bus, Dual-Line Motionnet Control Master Card
MN-SERVO Series	Distributed Motionnet Single-axis Motion Control Modules