

MN-3253/MN-3253T

Distributed Motionnet 32-ch Isolated DI Module

Features

- Maximum communication speed: 20 Mbps
- 32-ch isolated digital inputs
- Each Motionnet transfer Line: connect modules up to 64
- Designing isolation protection: power, communication, I/O
- LED Diagnostics for communication and I/O status
- Each port can be specified as NPN or PNP (12 ~ 24 V)

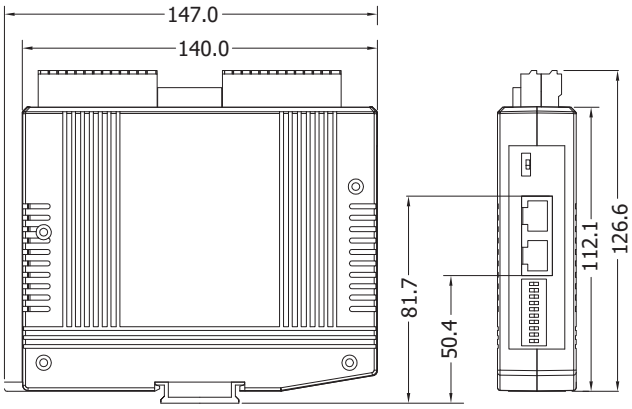
Introduction

The MN-3253(T) is an I/O expansion device for Motionnet systems, and is equipped with 32 isolated digital input channels. Each Motionnet communication line can be connected to up to 64 modules, meaning that the I/O can be expanded to up to 2048 input channels. The communication time required by each MN-3253(T) is 15.1 us. If 64 modules have been connected, signals for 2048 points on 64 modules can be sent and received within 0.97 msec. The update of the I/O status is completed automatically through the Motionnet system at a constant interval, and setting interrupts for specific input points that the customer wants to monitor can help prevent CPU time from being wasted by repetitive polling when there is nothing else for the issuing process to do. Each input port can be specified as either NPN or PNP (12 ~ 24 V).

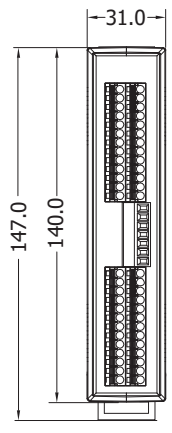
Specifications

Model	MN-3253	MN-3253T
Hardware		
Connector	13-Pin pluggable Terminal block x 4	
LED Indicators		
Status	Communication state (Link, Error), Internal 3.3 V Power, Termination Resistor Switch, Input/Output state	
Digital Input		
Channels	32	
Type	Wet Contact	
Sink/Source (NPN/PNP)	Sink/Source (NPN/PNP)	
ON Voltage Level	+10 ~ 30 VDC	
OFF Voltage Level	+3 VDC max.	
Isolation	3000 Vrms	
Input Impedance	4.7 KΩ	
Motionnet		
Communication Connectors	RJ-45 x 2	5-pin terminal block
Transfer Speed	Selectable 2.5, 5, 10 or 20 Mbps by DIP Switch	
Cyclic Time	15.1 μs per device (20 Mbps)	
Power		
Input Range	24 VDC (1000 V isolated)	
Consumption	2 W Max.	
Mechanical		
Casing	Plastic	
Dimensions (mm)	31 mm x 140 mm x 126.6 mm	
Installation	DIN-Rail mounting	
Environment		
Operating Temperature	0 ~ +60 °C	
Storage Temperature	-20 ~ +80 °C	
Humidity	10 ~ 90% RH, Non-condensing	

Dimensions: (Units: mm)



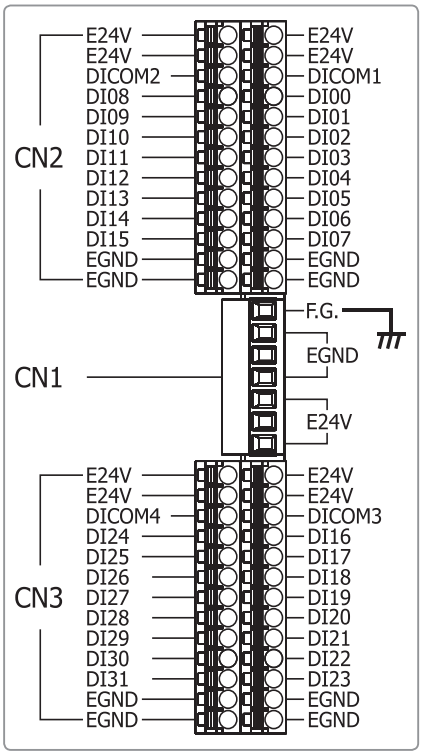
Right Side View Top View



Front View

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Pin Assignments



NO.	Name	Description	I/O
CN1			
1	FG	Frame Ground	-
2 ~ 4	EGND	External Ground	Input
5 ~ 7	E24V	External 24V (+)	Input
CN2A (Right)			
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)			
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)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DICOM3	Common terminal of DI16 ~ DI23	Input
4 ~ 11	DI16 ~ DI23	Digital input channels 16 ~ 23	Input
12 ~ 13	EGND	External Ground	Connect to CN1
CN3B (Left)			
1 ~ 2	E24V	External 24V (+)	Connect to CN1
3	DICOM4	Common terminal of DI24 ~ DI31	Input
4 ~ 11	DI24 ~ DI31	Digital input channels 24 ~ 31	Input
12 ~ 13	EGND	External Ground	Connect to CN1

Ordering Information

MN-3253 CR	Distributed Motionnet 32-ch Isolated DI Module with RJ-45 Connector (RoHS)
MN-3253T CR	Distributed Motionnet 32-ch Isolated DI Module with Terminal Block (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-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)

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