MN-3257/MN-3257T

Distributed Motionnet 32-ch Isolated DO Module

Features:

- Maximum communication speed: 20 Mbps
- 32-ch isolated digital outputs
- 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)
- The internal flywheel diode of each output ports can be connect to different sources of power individually.
- High current sinking capability (200 mA)

Introduction:

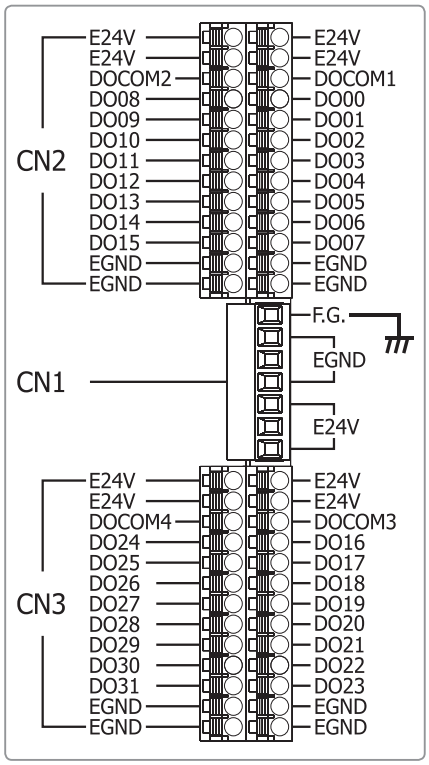
The **MN-3257(T)** is an I/O expansion device for Motionnet systems, and is equipped with 32 isolated digital output channels. Each Motionnet communication line can be connected to up to 64 modules, meaning that the I/O can be expanded to 2048 output channels. The communication time required by each MN-325x 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. The internal flywheel diodes of each output port can be individually connected to different sources of power (each port is comprise of 8 I/O signals).

Specifications:

Digital Output	
Output Channels	32
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
Interface	
LED Indicators	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 µs per device (20 Mbps)
Communication Connector	MN-3257: RJ-45 x 2 MN-3257T: 5-pin terminal block
I/O Connector	13-pin pluggable Terminal block x 4

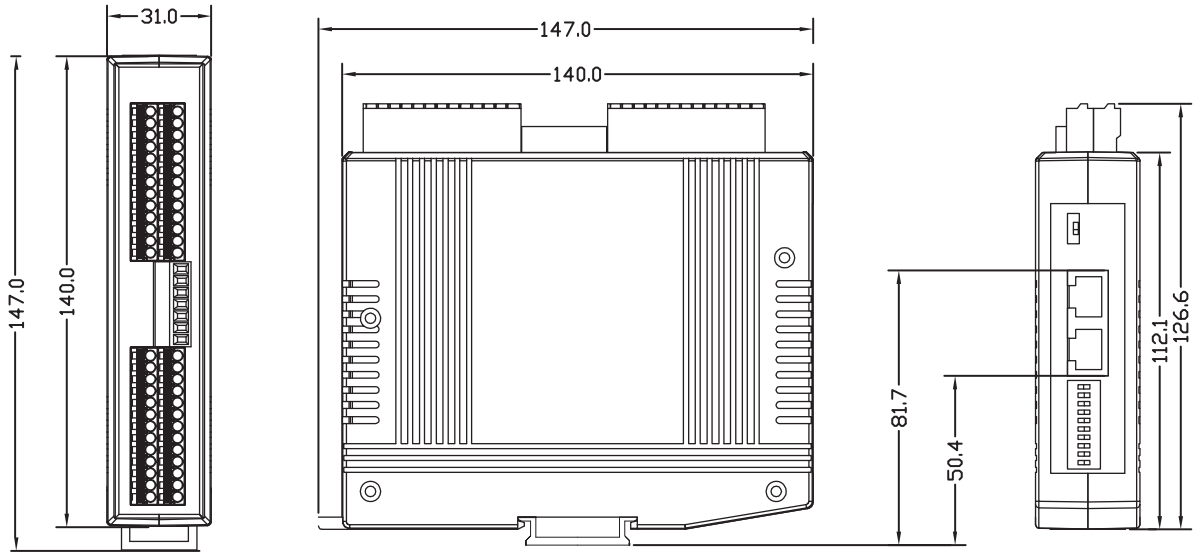
Power	
Voltage Range	24 VDC (1000 V isolated)
Power Consumption	2 W max.
Protection	Reverse voltage and overcurrent protection
Connection	7-pin removable terminal block
Mechanical	
Case	Plastic
Dimensions (W x H x D)	31 mm x 140 mm x 126.6 mm
Installation	DIN-Rail mounting
Environmental	
Operating Temperature	0 ~ + 60°C
Storage Temperature	-20 ~ +80°C
Operating Humidity	10 ~ 85%; Non-condensing
Storage Humidity	5 ~ 95%; Non-condensing

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	DOCOM1	Common Anode for Flywheel Diode of DO00~DO07	Input
4 ~ 11	DO00~DO07	Digital output channels 00~07	Output
12 ~ 13	EGND	External Ground	Connect to CN1
CN2B (Left) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	Connect to CN1
3	DOCOM2	Common Anode for Flywheel Diode of DO08~DO15	Input
4 ~ 11	DO08~DO15	Digital output channels 08~15	Output
12 ~ 13	EGND	External Ground	Connect to CN1
CN3A (Right) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	Connect to CN1
3	DOCOM3	Common Anode for Flywheel Diode of DO16~DO23	Input
4 ~ 11	DO16~DO23	Digital output channels 16~23	Output
12 ~ 13	EGND	External Ground	Connect to CN1
CN3B (Left) Pin Assignments			
1 ~ 2	E24V	External 24V(+)	Connect to CN1
3	DOCOM4	Common Anode for Flywheel Diode of DO24~DO31	Input
4 ~ 11	DO24~DO31	Digital output channels 24~31	Output
12 ~ 13	EGND	External Ground	Connect to CN1

Dimensions: (Units: mm)



Front View　　Right Side View　　Top View

Ordering Information/Accessories:

Model No.	Description
MN-3257 CR	Distributed Motionnet 32-ch Isolated DO Module with RJ-45 Connector (RoHS)
MN-3257T CR	Distributed Motionnet 32-ch Isolated DO Module with Terminal Block (RoHS)
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)