



MN-HUB4 / MN-HUB4EC

Distributed Motionnet 4 Port Hub Module

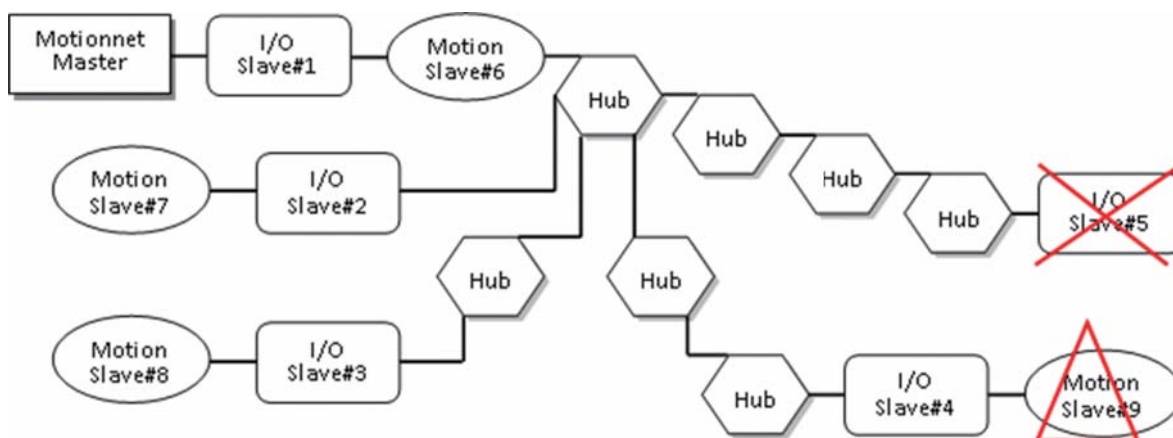
Features

- True Motionnet Star Wiring Hub
- Independent Motionnet transceiver for each channel
- Maximum communication speed: 20 Mbps
- LEDs for indicating each Motionnet activity
- RJ-45 jack for standard module while the EC module equipped with Mini-Clamp connector



Introduction

In some user's application, users may encounter some difficulty in wiring since the standard Motionnet only support daisy-chain topology. The **MN-HUB4** series modules can help users to use star or tree topology during wiring which not only can make the wiring more easier but also reduce the total wiring distance and cost.



Module ID	No. of Layers to Master	Accessible	Module ID	No. of Layers to Master	Accessible
1 (I/O)	0	Yes	6 (Motion)	0	Yes
2 (I/O)	1	Yes	7 (Motion)	1	Yes
3 (I/O)	2	Yes	8 (Motion)	2	Yes
4 (I/O)	3	Yes	9 (Motion)	3	Yes
5 (I/O)	4	No			

Motion Modules	No. of Layers between Modules	Interpolation	Motion Modules	No. of Layers between Modules	Interpolation
6 and 7	1	Yes	7 and 8	2	Yes
6 and 8	2	Yes	7 and 9	3	No
6 and 9	3	No	8 and 9	4	No

Accessories

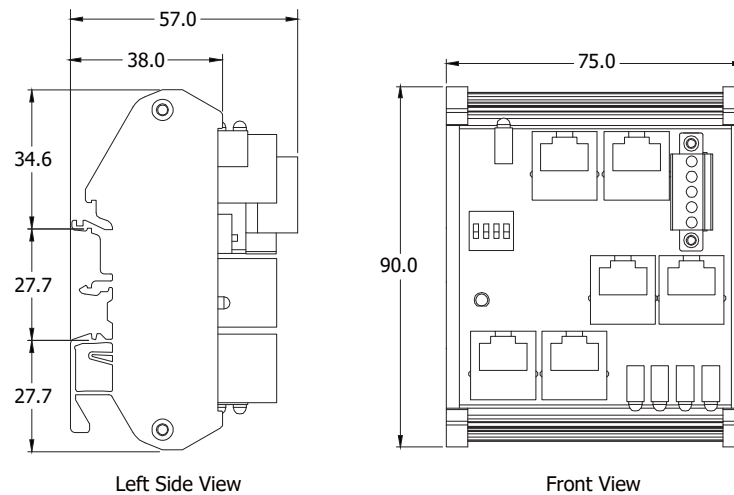
Mini Clamp Wiremount Plug			Applicable Wire		
ICP DAS Part No.	Cover Color	3M Part No.	AWG No.	Cross-sectional Area (mm ²)	Finished External Diameter Φ (mm)
4PKD100000001	Gray	37103-2206-000FL	20 – 22	0.3 – 0.5	1.6 – 2.0
4PKD100000002	Red	37103-3101-000FL	24 – 26	0.14 – 0.3	0.8 – 1.0
4PKD100000003	Orange	37103-3163-000FL	24 – 26	0.14 – 0.3	1.2 – 1.6



Specifications

Model	MN-HUB4	MN-HUB4EC
LED Indicators		
Status	Communication state (Link, Error) Internal 3.3 V Power	
Motionnet		
Communication Connectors	RJ-45	
Transfer Speed	2.5, 5, 10, 20 Mbps	
Layers between Modules	I/O or independent axis: 3 (Max.) Between two interpolation axes: 2 (Max.)	
Length	100 M Max. (20 Mbps; up to 32 modules) 50 M Max. (20 Mbps; up to 64 modules) 100 M Max. (10 Mbps; up to 64 modules)	
No. of Connection Line	Main Line (same layer): 2 Branch Line (to next layer): 4	
Power		
Input Range	12 - 24 V	
Environment		
Operating Temperature	0 ~ +60 °C	
Storage Temperature	-20 ~ +80°C	
Humidity	10 ~ 90% RH, Non-condensing	

Dimensions: (Units: mm)



Ordering Information

MN-HUB4 CR	Distributed Motionnet 4 port Hub module (with RJ-45 Jack)
MN-HUB4EC CR	Distributed Motionnet 4 port Hub module (with e-CON Mini-Clamp connector)

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-3253(T) CR / 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)