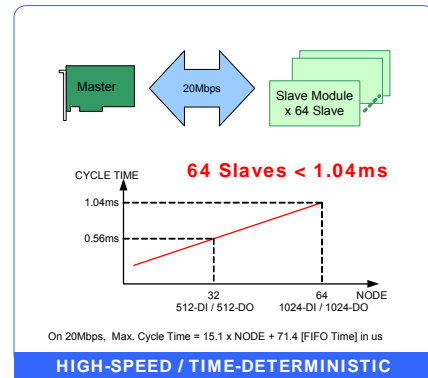
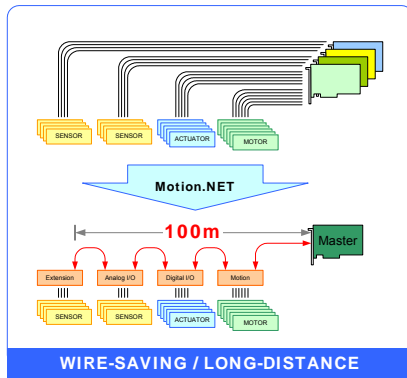


### Introduction

#### Overview

Motionnet is a series product based on innovative architecture and designed for versatile industrial automation applications, especially those with motion control requirements. Motionnet products are divided into 2 parts - **Master Card** and **Slave Module**. The communication between master and slave is based on a proprietary RS-485 technology with **Wire-Saving/Long-Distance** and **High-Speed/Time-Deterministic** features. The communication interface between master and host PC is accomplished by the way of Memory Mapping. Motionnet delivers slaves that mount on a standard industrial DIN rail and connects a bank of digital I/O, Motion and different modules. The master collects information from distributed slaves and publishes the data to its host PC or vice versa.



#### Master Card

Motionnet provides two kinds of master products, one is **basic master** and the other is **advanced master**. **Basic master** transfers data between host and slaves directly without any operation in between. **Advanced master** is equipped with a processor that is used to interpret commands from host to slaves and/or feedbacks results from slaves to host. Each port of the master can control up to 2048 I/O points or 64 axes or as a combination of I/O and Motion together. The master uses with different bus interface to communicate with the host PC, including **PC/104** and **PCI**. Due to the high-speed communication, Motionnet can also be considered as serialized ISA bus products. Customers can replace most ISA or PC/104 cards with Motionnet series products. Motionnet lowers total system costs with integrated software and distributed hardware that makes the product easier to set up and maintain.

#### Slave Module

Motionnet provides 3 categories of slaves, one is for **motion control**, the second is for **digital I/O** and the last is for miscellaneous function. Motionnet provides customer motion control modules that can be used together with either servo driver/motor or stepping driver/motor from different vendors. For digital I/O, there are 3 main types; they are 32In, 32Out and 16In/16Out. With these slaves you can connect your actuators/sensors directly and easily. You can access I/O points nearby or 100 meters away using simple wiring. The last is miscellaneous functions, mainly for analog type I/O to connect with different sensor types including thermocouples, RTD's, strain gauges etc.

#### Customized Extensions

In addition to the above outstanding features Motionnet supports customized extensions easily. The customized extensions range from Motion, Digital I/O to even intelligent functions. Products can be easily extended to support the functionality of DCS (Distributed Control System)

#### Conclusion

Motionnet provides engineers the freedom to quickly and easily place control/measurement nodes near motor/drivers and actuators/sensors, avoiding the inconvenience and cost of point-to-point wiring.

# MNET-D340/D322/D304

106 SLV DIO

## Motionnet Digital Input/Output Slave Module

### Features

- ◆ DIN rail mounting (L-124 x W-72 x H-53 mm)
- ◆ Max. 20Mbps transfer rate
- ◆ Flat-Cable connection
- ◆ Easy installation with RJ45 phone jack and LED diagnostic

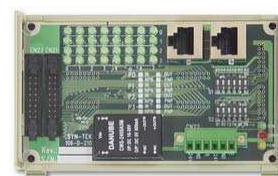
### Specifications

- ◆ Serial interface: half duplex RS-485 with transformer isolation
- ◆ Cable type: CAT5 UTP/STP Ethernet cable
- ◆ Surge protection: 10KV
- ◆ Transmission speed: 2.5Mbps, 5Mbps, 10Mbps and 20Mbps
- ◆ On-line module insertion and removal
- ◆ IO isolation voltage: 2.5KVrms
- ◆ Input impedance: 4.7K $\Omega$ /0.5W, Input current:  $\pm 5$ mA(Max)
- ◆ Output types: NPN open collector Darlington transistors
- ◆ Switch capacity: each output channel is 20~80mA at 24V DC
- ◆ Response time: On to Off, about 180 $\mu$ s; Off to On, about 1.2 $\mu$ s
- ◆ Power supply: +18V DC to +30V DC, consumption: 3W typical
- ◆ Working temperature: 0 to 60 $^{\circ}$ C

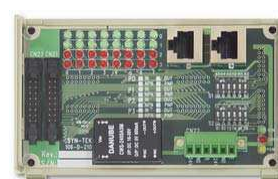
### Ordering Information

- ◆ **MNET-D340** \*  
32-CH digital input \*
- ◆ **MNET-D322** \*  
16-CH digital input and 16-CH digital output
- ◆ **MNET-D304**  
32-CH digital output

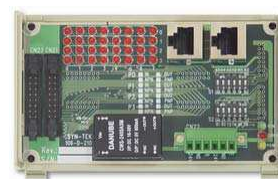
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**MNET-D340**



**MNET-D322**



**MNET-D304**

