



# Bridging the Gap between Real World and Computer



## EMD8216



### Software key function

## Ethernet Module Digital I/O

### Features

- ▶ Over-voltage and over-current protection on digital I/O
- ▶ Various IO combinations : 16-bit configurable input or output
- ▶ Input counter function
- ▶ High drive capacity on digital output
- ▶ IP Re-Assignment
- ▶ UDP and TCP/MODBUS protocol
- ▶ Peer to peer response time < 2ms
- ▶ Standalone function : step sequence control instruction, device to device communication
- ▶ Software key function

### Introduction

EMD8216 is an Ethernet digital I/O module. The module has 16-bit I/O's, any I/O can be as TTL level input or enhanced drive capacity output [500mA(peak), 45Vdc(max)] .

The module also provide the software counter function for any input up to 100Hz(5ms) counting speed.

I/O signals polarity can be changed by software.

To work as a standalone controller, users can configure the step sequence by the demo program or via their application and download the step sequences to the module. It will store on the non-volatile memory and run the programmed steps while standalone mode is enabled.

Dll is provided for WinXP, Win7 and later or LINUX platform and sample programs come with VB source code.

### Applications

- ▶ For remote contact sensing  
window or door open/close signal sensing  
alarm signal sensing  
fire detector signal sensing
- ▶ For remote contact make or break control  
window or door open close control

### Ordering Information

- ▶ **EMD8216** : Ethernet I/O module, 16 I/O
- ▶ **JD52000** : 110/220Vac to 24Vdc @1.5A power supply
- ▶ **JS52026** : 110/220Vac to 24Vdc @0.75A power adapter

### Specifications

#### Digital Input

- ▶ Input points : max 16(Configurable)
- ▶ Logic high level : 3.15V(min)
- ▶ Logic low level : 1.35V(max)
- ▶ Over-voltage protection : 60Vdc(max)
- ▶ Over-current protection : 50mA(max)

#### Digital Output

- ▶ Transistor output : max 16(Configurable)
- ▶ Transistor capacity : 50mA, 45Vdc(max)
- ▶ Standalone function : 32 steps control in struction

#### Ethernet

- ▶ 10/100M auto switch x 2 Port
- ▶ WDT : 1~1000sec based on 0.1 sec time base for communication discontinuity detect
- ▶ Response time 2ms

#### Main Card General

- ▶ Power requirement : 12Vdc ~24Vdc
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 115.4(D)\*136(W)\*34(H)mm  
4.6(D)\*5.4(W)\*1.4(H)in

### Software Support

#### ▶ PC OS Support

WinXP, Win7 and later or Linux O.S.  
Embedded XP, Win CE (at request)

#### ▶ Library

DLLs, VI library

#### ▶ Develop Software

Visual C++, Visual Basic,  
Borland C/C++ Builder, LabVIEW etc

#### ▶ Example Source Code

Visual Basic