



Bridging the Gap between Real World and Computer



EMD8216LE / LEP



Ethernet Module(Enhanced) Digital I/O With LED

Features

- ▶ Over-voltage and over-current protection on digital I/O
- ▶ Various IO combinations : 16 bit configurable input or output
- ▶ Virtual IO : 32 bit
- ▶ Input counter function
- ▶ High drive capacity on digital output
- ▶ IP re-assignment
- ▶ UDP and MODBUS TCP protocol
- ▶ Peer to peer response time < 1ms
- ▶ Enhanced Standalone function : step sequence control instruction, device to device communication
- ▶ Quadrature encoder counter : 2 channel
- ▶ Wide power supply input : 12~48Vdc
- ▶ PoE ready(EMD8216LEP)

Introduction

EMD8216LE/LEP is an Ethernet digital I/O module. The module has 16 bit I/O's With LED, 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
 - light control
 - Power on/off control

Specifications

Digital Input

- ▶ Input points : max 16(Configurable) With LED
- ▶ Logic high level : 3.15V(min)
- ▶ Logic low level : 1.35V(max)
- ▶ Over-voltage protection : 60Vdc(max)
- ▶ Over-current protection : 50mA(max)
- ▶ Counter input : any digital input
- ▶ Counter speed : 100Hz (max) square wave

Digital Output

- ▶ Transistor output : max 16(Configurable) With LED
- ▶ Transistor capacity : 50mA, 45Vdc(max)

Encoder counter

- ▶ Quadrature input : A 、 B 、 Z input x2
- ▶ Multiple rate : x2, x4
- ▶ Compare function

Standalone function

- ▶ Sequence control instruction : 128 steps

Ethernet

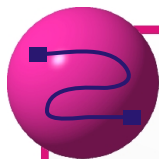
- ▶ 10/100M auto switch x 2 Port
- ▶ Response time 1ms
- ▶ PoE on port 0(EMD8216LEP)

Main Card General

- ▶ Power requirement : 12Vdc ~ 48Vdc
- ▶ Operation Temperature : 0 °C ~ +70 °C
- ▶ Storage Temperature : -20 °C ~ +80 °C
- ▶ Operation Humidity : 5~95% RH, non-condensing
- ▶ Dimensions : 114.3(L)*135.8(W)*34(H) mm
4.5(L)*5.4(W)*1.4(H) in



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Pin Assignments

EMD8216LE (JM0)
pin definitions

1	+Ve0*
2	IO_00
3	IO_01
4	IO_02
5	IO_03
6	GND

EMD8216LE (JM1)
pin definitions

1	IO_04
2	IO_05
3	IO_06
4	IO_07
5	GND

EMD8216LE (JM2)
pin definitions

1	+Ve1*
2	IO_10
3	IO_11
4	IO_12
5	IO_13
6	GND

EMD8216LE (JM3)
pin definitions

1	IO_14
2	IO_15
3	IO_16
4	IO_17
5	GND

Ordering Information

- **EMD8216LE** : EMD8216LE Ethernet Module with LED for 16 I/O
- **EMD8216LEP** : EMD8216LEP Ethernet Module with LED for 16 I/O
- **JD52038** : 110/220Vac to 24Vdc @1.5A power supply

Software Support

► PC OS Support

WinXP, Win7, Win10 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

Note