



Bridging the Gap between Real World and Computer



EMA8314R



Software key function

Introduction

EMA8314R is an ethernet analog input module, specially designed for RTD.

The module provides sensor line broken detection function on control mode. Once any input sensor line broken, the power LED will flick at 3 Hz and the communication can also report line broken by reading sensor status.

Standalone mode is another highlight of this module; there are four control modes available :

- mode 0 : Over high temperature limit ON, under low temperature limit OFF
(It is generally used in cooler control, air condition control)
- mode 1 : Over high temperature limit OFF, under low temperature limit ON
(It is generally used in heater control)
- mode 2 : Within high temperature limit and low temperature limit ON else OFF
- mode 3 : Within high temperature limit and low temperature limit OFF else ON
(Mode2 and mode3 is generally used in temperature monitoring and alarm system)

It is a priceworthy Ethernet IO module for your new design or replacement of existing project that want to upgrade to Ethernet communication.

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

Ethernet Module RTD

Features

- ▶ 4 channel input for Pt-100, Pt-1000 (EMA8314R)
- ▶ 4 Relay output
- ▶ Wide power range
- ▶ 10/100M auto detection
- ▶ UDP and TCP/MODBUS protocol
- ▶ Peer to peer response time < 2ms
- ▶ Sensor line broken detection
- ▶ Various standalone temperature control mode

Specifications

EMA8314R

- ▶ RTD Type : Pt-100 (range : -200 °C ~ +600 °C)
Pt-1000 (range : -200 °C ~ +600 °C)
- ▶ Channels : 4
- ▶ Wire connection : 2/3/4 wire
- ▶ Resolution : 24-bit
- ▶ Sample rate : 15 sample/second
- ▶ RTD break detection : Yes
- ▶ Digital output : 4 Relay output
- ▶ Output function : general out or alarm out
- ▶ Channels : 4
- ▶ Resolution : 24-bit
- ▶ Thermocouple broken detection : Yes
- ▶ Thermocouple Compensated : Yes
- ▶ Digital output : 4 Relay output
- ▶ Output function : general out or alarm out

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 : 0 °C ~ +70 °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



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Applications

- ▶ For remote temperature sensing
- ▶ For remote digital output or temperature alarm
- ▶ cooler control, air condition control, heater control
- ▶ temperature monitoring

Ordering Information

- ▶ **EMA8314R** : Ethernet I/O module for RTD
- ▶ **JD52000** : 110/220Vac to 24Vdc @1.5A power supply
- ▶ **JS52026** : 110/220Vac to 24Vdc @0.75A power adapter

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

Note