

# CIE-H<sub>10</sub>

# (Remote I/O Controller)





# **Overview**

CIE-H10 is a remote I/O controller.

This product helps to monitor and control digital inputs and outputs remotely.

Applying this module, not only you can reduce cost and risk, but also you can shorten development time to add the network capability in your system.

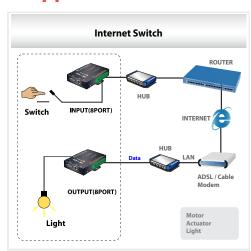
Because CIE-H10 allows to extend the distance of your I/O control system, you are able to remotely control and monitor the I/O devices over the Internet anywhere you are.

Since CIE-H10 has various methods for I/O control such as HTTP, Modbus/TCP and Serialized Modbus/TCP, it is available on various environments.

# **Highlights**

- Remote I/O controller
- RS232 to Ethernet Converter
- 10/100Base-T Ethernet, auto MDI/MDIX
- 8 Digital Input Ports (photo-coupler interface)
- 8 Digital Output Ports (relay interface)
- 1 x RS232 (up to 230,400bps, RS232 <--> TCP/IP processing)
- Access Restriction: IP and MAC address filtering, Password
- Stored Web server for simple management (custom web page)
- MACRO (stand-alone operation supports simple logical expressions)
- Supports Modbus/TCP
- Flexible configuration and network communication by 'AT Commands' (patent)
- 4 Communication modes (TCP server, TCP client, AT Command and UDP)
- Variety of monitoring status (debugging mode, ezManager, Telnet)
- DHCP and PPPoE
- DNS (easy access using domain name)
- DDNS (dynamic IP address management by domain name)
- IP Change Notification for dynamic IP address management (TCP, UDP and DDNS)
- Telnet COM Port Control Option (RFC 2217)
- Firmware upgrade through Network
- Powerful management software for Windows OS (ezManager)
- Virtual COM port redirector for Windows OS (ezVSP)
- Environmentally-friendly RoHS compliant

# **Applications**



# **Specifications**

# \*Digital Input Port

Number

8 ports

Interface:

isolated by Photo-coupler

**Electric Parameter** 

MAX VIL=1.2V, MIN VIH=1.8V

Maximum Input Voltage

DC 24V

# \*Digital Output Port

Number

8 ports

Interface

isolated by Relay

**Relay Capcacity** 

5A (DC28V),

10A (AC125V), 5A (AC250V)

# \*Serial Physical Interface

Serial Interface

1 x RS232 Port

RXD, TXD, RTS, CTS, DTR, DSR

±15KV ESD Protection

Connector

**DB9M Connector** 

### \*Serial Port Property

Data Rate

300 bps ~ 230400 bps

**Data Bits** 

5, 6, 7, 8 bits

**Parity** 

None, Even, Odd, Mark, Space

Stop Bit

1, 1.5, 2

Flow Control

RTS/CTS, DTR/DSR Hardware

# \* Network Physical Interface Network Interface

RJ45 (10Base-T/100Base-TX Ethernet) Ethernet Speed Auto Sense 1:1 or Cross-over Cable Auto Sense 1000 VAC Isolation

### \* Software Functions

**Protocols** 

TCP, UDP, IP, ICMP, ARP, Ethernet, TELNET TFTP, DHCP, PPPoE, DNS, HTTP, Modbus/

Security

IP & MAC filtering - Restrict host or network Password for Configuring

Digital I/O Port Communication Mode

Modbus/TCP, HTTP, Stand alone

(by simple equation), Remote Digital I/O

Communication Mode

TCP server (T2S)

TCP client (COD)

TCP server/client with AT command (ATC)

UDP mode (U2S)

#### **Additional Functions**

Remote Debug Function TCP server / client mode Sending MAC address Option

#### \* Indicators(LEDs)

Power

Red

Status

Yellow, The current status

**Ethernet Link** 

Red - 10M ethernet,

Green - 100M Ethernet

**Ethernet RXD** 

Yellow

**Ethernet TXD** Green

Digital Input

8 LEDs

**Digital Output** 

8 I FDs

### \* Processors

CPU

ARM7 Core

**ROM** 

256K bytes Flash Memory

64K bytes SRAM

### \* Management

ezManager

Configuration and Monitoring Tool thrugh Ethernet

Telnet

Telnet Login

AT Command

Configuring in ATC mode

#### \* Supplenetary Software ezManager

Configuration Tool for Windows

ezVSP

Serial to Network Virtual Driver for Windows

ezTerm

Simple TCP/IP Communication Test Tool

hotflash

Firmware Upgrade Utility for Windows

#### \* Dimension

Size

153mm x 126mm x 32m

**Body Netweight** 

about 530g

# \* Operating Environment

Input Voltage

DC 5±0.5V

**Power Consumption** 

510mA typical

**Operating Temperature** 

0 ℃ ~ 55 ℃

Storage Temperature

-40 °C ~ 85 °C

CE

F690501/SP-EMC000976

MIC

SLS-CIE-H10 (A)

### \* Emissions

EN55022:1998/A1:2000/A2:2003 (Class A)

EN61000-3-2:2000

EN61000-3-3:1995/A1:2001

EN55024:1998/A1:2001/A2:2003

### \* Immunity

IEC61000-4-2:2001

IEC61000-4-3:2006

IEC61000-4-4:2004

IEC61000-4-5:2005 IEC61000-4-6:2006

IEC61000-4-11:2004

# **System Diagram**

