BEMG-4110

Energy Data Concentrator with 4 x COM. 1 x LAN



Features

- 2 x RS-232/485, 2 x RS-232/422/485 with automatic flow control
- 1 x 10/100Base-T RJ-45 port and 2 x USB 2.0 ports
- Fanless design with no internal cabling
- Built-in Windows® CE with Advantech WinCE WebAccess Energy Data
- Supports various protocol drivers to communicate with different devices
- Multi-thread communication, fast response time
- Configured through web browser
- Easy to diagnose and maintain, which helps to reduce maintenance costs



Introduction

Advantech's BEMG-4110 is a fanless Energy Data Concentrator featuring an AMD Geode LX800 500MHz and rich interfaces (such as serial, USB and LAN). Installed with Advantech WinCE WebAccess, BEMG-4110 is a browser-based Energy Data Concentrator, whose Web Server function increases flexibility and convenience, making it easy to configure and maintain the system via Internet. With built-in driver, BEMG-4110 can connect with a variety of automation equipment and devices, and get data from them.

Specifications

General

Certification CE, FCC Class A, CCC

Dimensions (W x D x H) 188.8 x 106.5 x 35.5 mm (7.5" x 4.2" x 1.4")

 Enclosure Aluminum Mounting Wallmount, DIN-rail

 Industrial Grounding Isolation between chassis and power ground

 Power Consumption 15 W (typical)

 Power Requirements 10 ~ 48 V_{DC} (e.g +24 V @ 1 A) (Min. 24 W), AT

- Weight $0.8 \, \text{kg}$

 System Design Fanless with no internal cabling

 Remote Management Built-in Advantech DiagAnywhere agent on Windows

CE/XPe

System Hardware

CPU AMD Geode LX800 500MHz Onboard 256 MB DDR SDRAM Memory

Indicators LEDs for power, IDE, diagnosis (programmable) and

LAN (Active, Status)

Buzzer for diagnosis (programmable)

Keyboard/Mouse

Storage SSD: 1 x internal type I/II CompactFlash® slot HDD: expansion kit for 2.5" IDE HDD (Option)

DB15 VGA connector, 1024 x 768 @ 60 Hz Display

 Watchdog Timer Programmable 256 levels timer interval, from 1 to 255

sec

I/O Interface

Serial Ports 2 x RS-232/485, 2 x RS-232/422/485

- Automatic RS-485 data flow control

- RS-422/485 surge protection up to 2,000 V_{DC}

 Serial Port Speed RS-232: 50 ~ 230.4 kbps;

RS-422/485: 50 ~ 921.6 kbps (Max.)

USB Ports 2 x USB ports, EHCI, Rev. 2.0 compliant

1 x 10/100Base-T RJ-45 port LAN

Software Specifications

 Operating System Windows CE 5.0

Advantech WinCE WebAccess Energy Data Concentrator:

 I/O Tag Number 600 Internal Tag Number 600 Web Client 2 • Number of I/O Devices 64 (max)

Environment

 Humidity 95 % @ 40°C (non-condensing)

 Ingress Protection IP40

Operating Temperature (IEC 60068-2-2, 100% CPU/ I/O loading)

-10 ~ 55°C (14 ~ 131°F)

Shock Protection

CompactFlash®: 20 G @ DIN, half sine, 11 ms,

50 G @ Wall/Panel, half sine, 11 ms

 Vibration Protection IEC 68 2-6

CompactFlash®: 2 Grms @ sine, 5 ~ 500 Hz,

1 Oct./min, 1hr/axis.

HDD: 1 Grms @ sine, 12 ~ 300 Hz, 1 Oct./min,

1 hr/axis.

Ordering Information

 BEMG-4110-AE Energy Data Concentrator with 4 x COM, 1 x LAN