

# 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 Concentrator
- 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<sub>DC</sub> (e.g. +24 V @ 1 A) (Min. 24 W), AT
- **Weight** 0.8 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
- **Memory** Onboard 256 MB DDR SDRAM
- **Indicators** LEDs for power, IDE, diagnosis (programmable) and LAN (Active, Status)  
Buzzer for diagnosis (programmable)
- **Keyboard/Mouse** 1 x PS/2
- **Storage** SSD: 1 x internal type I/II CompactFlash® slot  
HDD: expansion kit for 2.5" IDE HDD (Option)
- **Display** DB15 VGA connector, 1024 x 768 @ 60 Hz
- **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<sub>DC</sub>
- **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
- **LAN** 1 x 10/100Base-T RJ-45 port

### 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** IEC 68 2-27  
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