

# BEMG-4220

## Energy Data Concentrator with 128 Devices

NEW



### Features

- Onboard Celeron® M 600 MHz or Celeron M 1.0 GHz
- Two RS-232 and two RS-232/422/485 ports with automatic flow control
- Two 10/100Base-T RJ-45 ports
- Two USB ports and one type I/II PC card
- 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
- Point transfer between communication devices within one BEMG

### Introduction

Advantech's BEMG-4220 is fanless Energy Data Concentrator that supports serial communication ports and several networking interfaces. Installed with Advantech's WinCE WebAccess, BEMG-4220 is a browser-based Energy Data Concentrator, whose Web Server function increases flexibility and convenience, and makes it easy to configure and maintain the system via Internet. With a built-in driver, BEMG-4220 can connect with variety of automation equipment and devices, and get data from them.

### Specifications

#### General

- **Certifications** CE, FCC Class A, UL, CCC
- **Dimensions (W x D x H)** 255 x 152 x 50 mm (10" x 6.0" x 2.0")
- **Enclosure** Aluminum
- **Mounting** Wallmount
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 24 W (Typical)
- **Power Requirements** 9 ~ 36 V<sub>DC</sub> (e.g +24 V @ 2 A) (Min. 48 W), AT
- **Weight** 1.6 kg
- **System Design** Fanless with no internal cabling
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE / XPe

#### System Hardware

- **CPU** Celeron M 600 MHz, Celeron M 1.0 GHz
- **Memory** 256 MB/512 MB DDR SDRAM built-in
- **Battery Backup SRAM** 512 KB
- **Indicators** LEDs for Power, IDE, Alarm for battery backup SRAM, LAN (Active, Status) and Serial (Tx, Rx)
- **Keyboard/Mouse** 1 x PS/2
- **PC Card** 1 x PC Card slot, supports CardBus (Card-32) Card and 16-bit (PCMCIA 2.1/JEIDA4.2) card Supports +5, +3.3 and +12 V @ 120 mA working power
- **PC/104 Slot** 2 x PC/104 slots (optional). Supports +5 V power
- **Printer Port** 1 x printer port
- **Storage** SSD: 1 x internal type I/II CompactFlash® slot  
HDD: Build-in one 2.5" SATA HDD bracket
- **Display** DB15 VGA connector, 1600 x 1200 @ 85 Hz
- **Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec

#### I/O Interface

- **Serial Ports** 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors  
Automatic RS-485 data flow control
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps  
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **LAN** 2 x 10/100 Base-T RJ-45 ports (Built-in boot ROM in flash BIOS)
- **USB Ports** 2 x USB, EHCI, Rev. 2.0 compliant

#### 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 128 (max)
  - Data access com. port 4

#### Environment

- **Humidity** 95% @ 40°C (non-condensing)
- **Operating Temperature** (IEC 60068-2-2, 100% CPU/ I/O loading)  
-20 ~ 50°C (-4 ~ 122°F) @ 5 ~ 85% RH.
- **Shock Protection** IEC 68 2-27  
CompactFlash: 50 G @ wall mount, half sine, 11 ms  
HDD: 20 G @ wall mount, half sine, 11 ms
- **Vibration Protection** IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)  
CompactFlash: 2 Grms @ 5 ~ 500 Hz,  
HDD: 0.5 Grms @ 5 ~ 500 Hz

### Ordering Information

- **BEMG-4220-AE** Energy Data Concentrator with 4 x COM, 2 x LAN