Introduction

Advantech’s BEMG-4220 is a 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 a 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 VDC (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, JEDIA 4.2) card
- 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
- Display: 512 KB
- Watchdog Timer: Programmable 256 levels timer interval, from 1 to 255 sec

I/O Interface
- Serial Ports: 2 x RS-232, 2 x RS-232/242/485 with DB9 connectors
- Serial Port Speed: Automatic RS-485 data flow control
- 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 (max): 128
  - 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 Gms @ 5 ~ 500 Hz,
  - HDD: 0.5 Gms @ 5 ~ 500 Hz

Ordering Information
- BEMG-4220-AE: Energy Data Concentrator with 4 x COM, 2 x LAN

BEMG-4220
Energy Data Concentrator with 128 Devices

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