

BEMG-4221/4222

Energy Data Concentrator
with 6 x USB, 4 x COM/
8 x COM, 128 Devices

NEW



BEMG-4221

BEMG-4222



Features

- Onboard Intel® Atom™ N450/D510 1.67GHz processors
- 2 x 10/100/1000 Base-T RJ-45 port, 6 x USB 2.0 ports
- 2 x Mini PCIe slot with 1 x SIM slot support
- Isolation between chassis and power ground
- Supports wide operating temperatures from -10 ~ 70°C
- Supports 8 x COM ports (BEMG-4222)
- Built-in Windows® CE with WebAccess Energy Data Concentrator
- Configured through web browser
- Supports various protocol drivers to communicate with different devices
- Support data transfer to Advantech BEMS

Introduction

BEMG-4221 and BEMG-4222 are powerful data concentrators bundled with SCADA software - WebAccess. With Intel Atom N450/D510 1.67GHz CPUs, Gigabit Ethernet ports, rich I/O, and 2 x Mini PCIe socket. Both products have Energy Star certification, IP40 anti-dust ingress protection and wide operating temperatures (-10 ~ 70°C), providing high performance and high versatility with low power consumption.

WebAccess communicates with automation equipment used in manufacturing facilities, industrial plants and building automation systems. The software acquire, display, monitor and store real-time data and allows operators to change set-points, equipment status and other parameters in end-device.

Specifications

General

- Certification** Energy Star, CE, FCC Class A, UL, CCC, C-Tick Class A, BSMI
- Dimensions (W x D x H)** BEMG-4221: 255 x 152 x 50 mm (10' x 6.0' x 2.0")
BEMG-4222: 255 x 152 x 59 mm (10' x 6.0' x 2.3")
- Enclosure** Aluminum +SECC
- Mounting** DIN-rail, Wallmount, VESA
- Industrial Grounding** Isolation between chassis and power ground
- Power Consumption** BEMG-4221: 12W (Typical)
BEMG-4222: 16W (Typical)
- Power Requirements** 9 ~ 36 Vdc (e.g +24 V @ 1.5 A) (Min. 36 W), ATX
- Power Suspend Mode** S3, S4
- Weight** 2.5 kg
- System Design** Fanless design with no internal cabling

System Hardware

- CPU** BEMG-4221: Intel® Atom™ D510 Dual Core 1.67GHz
BEMG-4222: Intel® Atom™ N450 1.67GHz
- Memory** 2 GB DDR2 SDRAM built-in
- Indicators** LEDs for Power, CF, LAN (Active, Status), Serial (Tx, Rx)
- Keyboard/Mouse** 1 x PS/2
- Storage** CF: 1 x front-accessible type I/II CompactFlash® slot
HDD: 1 x built-in 2.5" SATA HDD/SSD bracket
- Display** DB15 VGA connector
BEMG-4221 supports: 1400 x 1050
BEMG-4222 supports: up to 2048 x 1536
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec
- Printer Port** 1 x Printer port (BEMG-4222)

I/O Interface

- Serial Ports** BEMG-4221: 2 x RS-232/485 (COM1-2),
2 x RS-232/422/485 w/ 128kB FIFO (COM A-B)
BEMG-4222: 2 x RS-232/485 (COM1-2),
2 x RS-232/422/485 w/ 128kB FIFO (COM A-B),
4 x RS-232/485 from DB25 print port (COM3-6)
- Serial Port Speed** 50-115.2 kbps (COM 1-6 in RS-232/485 mode)
50-115.2 kbps (COM A/B in RS-232 mode)
50-921.6 kbps (COM A/B in RS-422/485 mode)
- LAN** 2 x 10/100/1000 Base-T RJ-45 port (Built-in boot ROM in flash BIOS)
- USB Ports** 6 x USB 2.0
- Audio** Line in, Line out, Mic in (5.1 channel HD audio)

Environment

- Humidity** 95% @ 40°C (non-condensing)
- Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading
-10 ~ 70°C (14 ~ 158°F)
- Ingress Protection** IP40
- Shock Protection** IEC 60068-2-27
CompactFlash®: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash®: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- BEMG-4221-P21C-AE** Energy Data Concentrator, Atom N450 1.67GHz, 2GB RAM
- BEMG-4222-P31C-AE** Energy Data Concentrator, Atom D510 1.67GHz, 2GB RAM

Accessories

- UNO-FPM21-AE** UNO-2000 series VESA mount kit
- 968EMW0021** Mini PCIe card for WLAN
- 1700001854** SMA/I-PEX cable 11CM
- 1750003222** 5dBi Dipole Antenna
- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility

- Motion Control
- Hazardous Location
- Energy Automation
- Building Automation Systems
- Automation Software
- Operator Panels
- Automation Panel PCs
- Industrial Monitors
- Industrial Ethernet
- Device Servers & Gateways
- Serial Communication Cards
- Embedded Auto. Computers
- PACs
- M2M I/O
- Distributed Nano Controllers
- RS-485 I/O
- Ethernet I/O
- DAQ Boards