

Alerton Integration Engine A-7

Features and highlights

Flexible

Supports open and legacy protocols.

Powerful

Provides stand-alone control, energy management and multiprotocol integration.

Intuitive

Built-in recharging and monitoring support for external battery.

Dynamic

On-board web user interface serves rich presentations and live data to a browser.

Interoperable

Certified as BACnet Building Controller (B-BC) level device.





The Alerton® Integration Engine A-7 is a compact, embedded controller/server platform that combines integrated control, supervision, data logging, alarming, scheduling and network management functions with Internet connectivity and web-serving capabilities in a small, compact platform. The A-7 enables you to control and manage external devices over the Internet and view real-time information in web-based graphical displays.

The A-7 is part of Alerton's line of products designed to integrate a variety of devices and protocols—including BACnet™, LonWorks™, Modbus, oBIX, Internet standards and many others—into unified, distributed systems.

The Alerton A-7 serves data and rich graphical displays to a standard web browser using an Ethernet LAN or remotely over the Internet, or dial-up modem. In larger facilities, multi-building applications and large-scale control system integrations, Alerton's Envision for BACtalk™ software can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of Alerton Integration Engines into a single unified application. BACtalk can manage global control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over the local network, the Internet, or optional modem card.

The A-7 is ideal for remote sites and for distributing control and monitoring throughout large facilities. Optional input/output modules can be plugged in for applications where local control is required. The A-7 supports a wide range of field busses for connection to remote I/O and stand-alone controllers.



Data Sheet

Alerton Integration Engine

Technical data

• **Power** The A-NPB-PWR—Optional: 24 Volt AC/DC power supply module, DIN rail mounted. NPB-PWR-UN—Optional universal voltage input power supply module (90-263 VAC, 50/60 Hz), DIN rail or panel mount. Input voltage is 90–263 Volts AC, 50/60 Hz, auto adjusting. Power required is 15 Volts DC at 20 watts Max.

Optional Wall Power Modules*

- WPM-US: 120 VAC, 50- 60 Hz. US
- WPM-EU: 230 VAC, 50-60 Hz. Europe/Asia
- WPM-UK: 230 VAC 50-60 Hz. UK

- Optional Communications Cards
 - · NPB-LON: Optional 78 Kbps FTT10 A Lon Adapter
 - NPB-232: Optional RS-232 port adapter with 9 pin D- shell connector
 - NPB-2X-485: Optional dual port RS-485 adapter; electrically isolated
- Processor & Memory 667 MHz 440Epx Power PC processor; 1GB NAND flash memory on board for database storage, trend storage and system software. Internal battery backup to allow system database save after power failure, plus maintenance of real-time clock for up to one year. 512 MB DDR-2 333 MHz RAM, field upgradable to 1 GB via license upgrade.
- Operating System QNX OS version 6.3.2 with IBM J9 Virtual Machine version 2.3, Niagara^{AX} Release 3.5 or higher.
- **Dimensions** 6" (152.4mm)H x 8.5" (215.9mm)W x 2.62" (68.3mm)D.
- Terminations Removable header-type screw terminals accept 14–24 AWG wire.
- Environmental 32–122 deg. F (0–50 deg. C). Relative humidity range: 0–90%, non-condensing (for electronics).
- **Communications** Two 1GB Ethernet ports, one RS-232 port, one isolated RS-485 port, two USB 2.0 ports (for future application use). Two Alerton Integration Engine communication slots for optional Alerton Integration Engine communication interface card use.
- BACnet Conformance B-BC level device; tested and approved by BTL. See Protocol Implementation Conformance Statement (PICS).
- Ratings

UL 916, C-UL listed to Canadian Standards Association (CSA), C22.2 No. 205-M1983 "Signal Equipment," CE, FCC part 15 Class A, RoHS compliant, BTL B-BC listed when optional BACnet driver is used.

Ordering information

Item number	Description
A-7	Controller/server with 2 Ethernet ports, 1 RS-232 port, 1 RS-485 port, 2 USB ports and 2 communication card option slots
A-NPB-PWR	24 V AC/DC power supply module, DIN rail mountable
A-NPB-PWR-UN	90–263 V AC 50/60 Hz Auto sensing power supply module, DIN rail mountable
NPB-LON	78 Kbps FTT 10 A LON® adapter. Uses one of the two communication slots in the AIE-2 or AIE-6 or A-7 $$
NPB-232	Single Port RS 232 Option Card
NPB-2X-485	Dual Port RS 485 Option Card
	Specifications subject to change without notice

^{*} Note: All modules are universal input 90–240 Volts, 50/60 Hz.; model numbers above represent the various plug configurations only. The WPM is supplied with a "barrel plug," which must be removed and the wires attached to the Alerton Integration Engine terminal connector to use this power option.