



# BACtalk® Integrator (BTI™)

BACnet-compliant Global Controller



The BACtalk® Integrator (BTI™) is the next-generation BACnet-compliant global control device from Alerton®. BTIs can connect to a 10Base-T or 100Base-TX BACnet Ethernet network over unshielded twisted pair cable (UTP). BTIs support field controllers on 4 BACnet MS/TP LANs, configurable up to 76.8 Kbps each. The BTI is IP capable for interoperability across campuses or continents.

The BTI independently executes global control algorithms to orchestrate the operation of field controllers on its MS/TP LANs, accessing operational data from throughout the BACnet internetwork. DDC is programmed at a BACtalk operator terminal with Alerton's easy-to-use, Windows-based graphical programming environment, VisualLogic®. Revolutionary features like drag-and-drop DDC edits, dynamic real-time data updates, and self-documentation save time and ease the setup process.

In addition to executing DDC, the BTI also performs automated control functions—schedules, trendlogs, and alarms—which are set up at a BACtalk operator terminal.

## Features & Application Highlights

- **Interoperable** BACnet-compliant controller with 10Base-T and 100Base-TX Ethernet and four MS/TP connections to BACnet internetwork.
- **Powerful** Global control algorithms and automated control functions execute quickly and reliably on a 32-bit Motorola Power PC platform with more than 32 MB SDRAM.
- **Versatile** Independent or system-integrated operation. Standard options for BACtalk operator terminal connection: BACnet Ethernet or BACnet PTP over built-in 33.6 Kbps modem or direct serial cable.
- **Reliable** Onboard battery-supplied power source, extensive noise filtering, 16 MB CompactFlash, 128 K SRAM, and 64 K FLASH ROM ensure data reliability.

For site monitoring and control system setup, technicians can use BACtalk operator terminals connected permanently or temporarily over Ethernet. For sites that require fully independent operation of the BTI or that call for roaming or remote access to data, the BTI offers an internal 33.6 Kbps modem and a standard 9-pin RS-232 port to host direct serial-cable connections between 9.6 and 115.2 Kbps.

The BTI makes all its operational status and control data available as BACnet objects and properties, as well as data from controllers on its MS/TP LANs. This enables an unmatched level of interoperability with other site systems.

A battery-backed, real-time clock, CPU watchdog, 6-layer circuit design with separate ground plane, battery powered shutdown, 128 K SRAM, CompactFlash, and a shock-resistant, flame-retardant case ensure the highest level of reliability available.

**Product Number**

**BTI**

BTI		Technical Data
<b>Power</b>	24 VAC , 50-60 Hz @ 10 VA. Utilizes a full-wave rectifier, which requires a dedicated 24 VAC transformer.	
<b>Onboard Power Source</b>	Onboard power source with memory-free gell cell battery provides ongoing power conditioning and noise filtering for operational data integrity. Also provides up to 5 minutes of powerless operation for orderly shutdown and data backup.	
<b>Battery</b>	Replaceable 3.0V lithium battery provides up to 1.5 years (cumulative) real-time clock (without external power supply). Unused battery life is 10 years. Coin-cell type BR1225 or equivalent.	
<b>Memory &amp; CPU</b>	128 K static RAM and 32 MB dynamic RAM for program execution, in addition to 16 MB CompactFlash and 64 K FLASH ROM provides high performance and data reliability. 32-bit high-integration Motorola Power PC running at 50 MHz.	
<b>Real-time Clock</b>	Onboard, battery-backed, real-time clock supports schedule operations, trendlogs, and timed DDC functions.	
<b>BACnet Ethernet</b>	Integrated Ethernet adapter circuitry with RJ-45 jack for connection to 10Base-T (10 Mbps) or 100Base-TX (100 Mbps) networks.	
<b>BACnet Internet Protocol (IP)</b>	IP support for interoperability on wide area networks (WANs) and campus area networks (CANs). Functions as a BACnet Broadcast Management Device (BBMD) in accordance with BACnet Annex J.	
<b>BACnet MS/TP</b>	Removable, header-style screw terminals for 4 BACnet MS/TP (shielded twisted-pair bus) LANs, each individually configurable from 9.6 to 76.8 Kbps.	
<b>Internal Modem</b>	Internal 33.6 Kbps analog modem standard (RJ-11 modem jack). Supports BACnet temporary point-to-point (PTP) connection of remote BACtalk operator terminal over public switched telephone network.	
<b>Direct Access Port</b>	Female DB-9 connector supports BACnet temporary PTP connection of portable BACtalk operator terminal at 9.6 to 115.2 Kbps over RS-232 null modem cable and connection of an external modem.	
<b>Dimensions</b>	7.10" (181mm) H X 7.00" (178mm) W X 1.62" (42mm) D.	
<b>Environmental</b>	32–131°F (0–55°C). 0–95% RH, non-condensing.	
<b>BACnet Conformance</b>	Conformance Class 3. See Protocol Implementation Conformance Statement (PICS).	
<b>Ratings</b>	<ul style="list-style-type: none"> <li>Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916. Listing includes both U.S. and Canadian certification.</li> <li>EMC Directive 89/336/EEC (European CE Mark).</li> <li>FCC Part 15, Subpart J, Class A. Pending.</li> </ul>	
<b>Software</b>	<b>Programming Interface</b>	BACtalk for Windows over BACnet network (Ethernet) or temporary PTP connection (modem or direct-connect).
	<b>DDC</b>	VisualLogic® control algorithms execute locally every second. Capacity for 1000 DDC functions, 1000 AVs, 1000 BVs.
	<b>Schedules</b>	Up to 400 schedules.
	<b>Alarms</b>	Up to 4000 alarm setups stored as BACnet event enrollment objects—system destination and actions individually configurable.
	<b>Trendlogs</b>	Up to 2000 trendlogs store data point histories for analysis.

Specifications subject to change without notice.

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