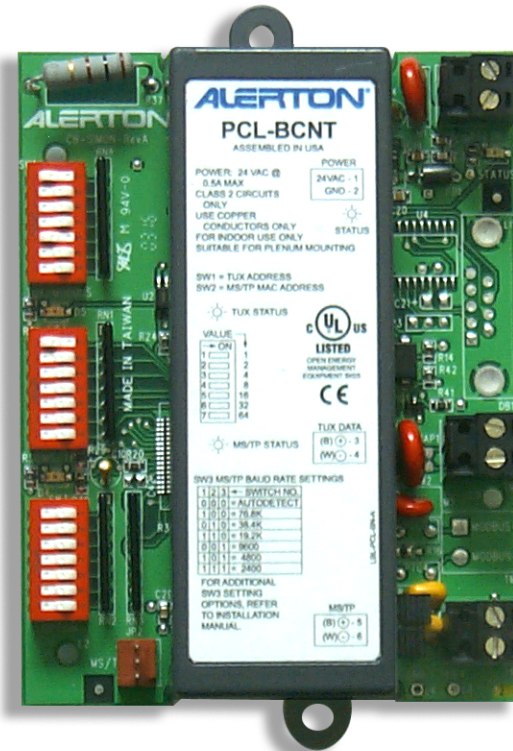# ALERTON®

IBEX™/BACnet® Protocol Converter Link

Highlights

- **Capable**
  Supports up to 127 BACnet objects and properties, enabling an IBEX system to read and write BACnet values as TUX points.

- **Cost-effective**
  Extend investment in existing IBEX systems to support a BACnet-compliant device over MS/TP.

- **Easy to use**
  Set up conversions with a simple interface and monitor conversion status point-by-point in software.

- **Reliable**
  A hardware watchdog, nonvolatile flash memory, and a four-layer circuit design with separate ground plane ensure long life and reliable operation.

The IBEX/BACnet protocol converter link (PCL-BCNT) enables IBEX systems to communicate with BACnet-compliant devices. The PCL-BCNT is installed between an IBEX TUX trunk and a BACnet MS/TP network, translating object and property data from a single BACnet device to IBEX TUX points.

Each PCL-BCNT supports a total of 127 TUX I/O points—31 AIs, 32 AOs, 32 BIs, and 32 BOs. Each of these points is individually mapped to a BACnet object and property with a simple one-time setup in TUX DDC. The PCL-BCNT supports reading and writing values for most standard BACnet property types as well as proprietary object types.

The PCL-BCNT appears to the IBEX system as a TUX, enabling IBEX global controllers and other devices to read, write, and automate BACnet objects and properties like any TUX data point.
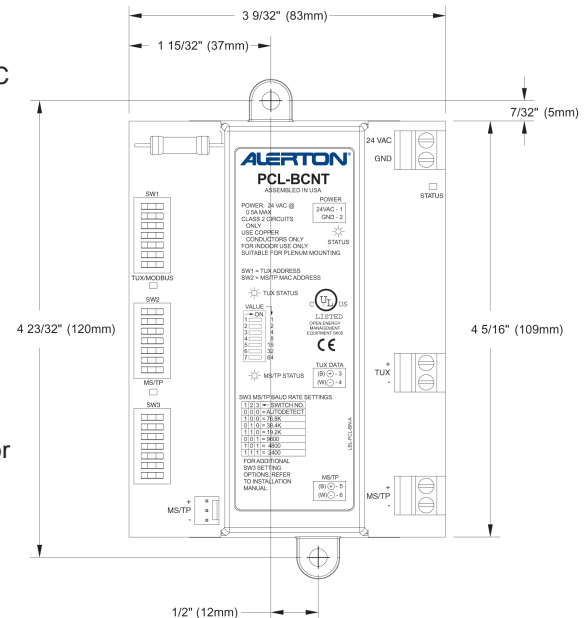
An MS/TP service port offers easy connection of an Alerton service tool to download field firmware upgrades to the PCL-BCNT if necessary.

With a hardware watchdog, nonvolatile flash memory, and a four-layer circuit design, the PCL-BCNT is a reliable and durable addition to extend the capabilities of any Alerton IBEX system.

IBEX™/BACnet® Protocol Converter Link

Technical Data

- **Power**   24 VAC @ 0.5 VA. Utilizes a half-wave rectifier, which allows a single transformer to power multiple half-wave devices. One leg of 24 VAC connects to earth (panel) ground.

- **Maximum dimensions**
  5.2" (132mm) H x 3.3" (83mm) W x 1.1" (28mm) D.

- **Terminations**   Removable header-type screw terminals accept 14–24 AWG wire. An additional header is provided for easy connection to MS/TP for testing.

- **IBEX TUX trunk**   IBEX TUX trunk communications at 4800 or 9600 baud. Compatible with Microview for Windows, APEX, and APEX-LT TUX trunks.

- **BACnet MS/TP LAN**   Auto detects BACnet MS/TP communications rate or can be manually configured up to 76.8 Kbps.

- **Environmental**   0–158°F (-17–70°C). 0–95% RH, non-condensing.

- **Ratings**

  Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916. Listing includes both U.S. and Canadian certification.

  EMC Directive 89/336/EEC (European CE Mark).

  FCC Part 15, Subpart J, Class A.

Software

- **TUX I/O**   Appears to IBEX system as a TUX with 127 TUX I/O points—31 AI, 32 DI, 32 AO, and 32 DO.

- **BACnet properties and data types**   Supports most common BACnet objects and properties, including AI, AV, AO, BI, BO, BV, MI, MO, and MV.

- **Diagnostics**   A special TUX AI provides connection status and conversion status for individual data points.

Ordering Information

Item number	Description
PCL-BCNT	IBEX/BACnet protocol converter link