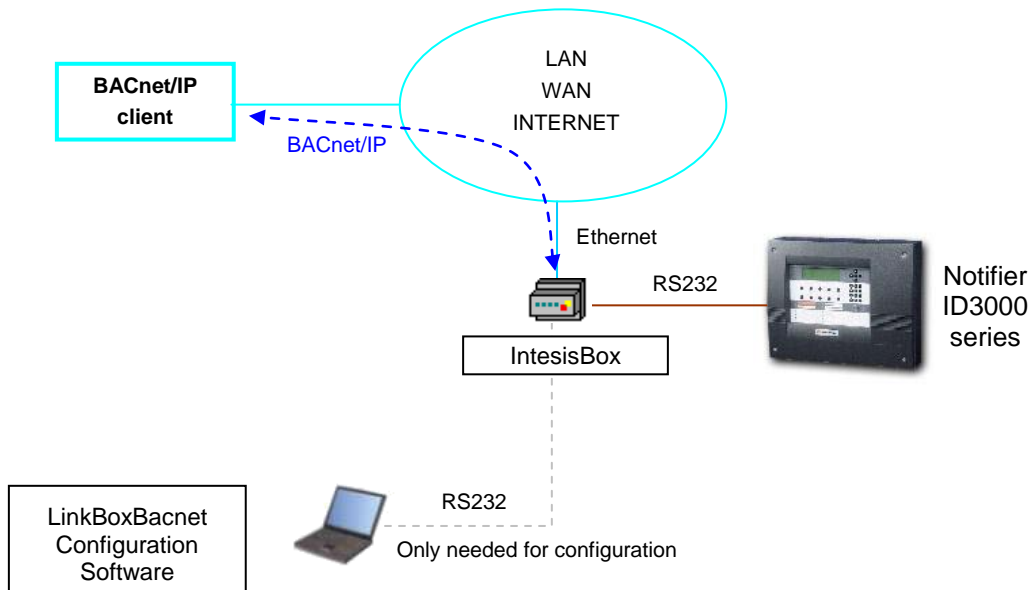# IntesisBox®

BACnet/IP Server - Notifier ID3000 series

Gateway for integration of Notifier ID3000, ID3002, ID50 and ID60 fire panels into BACnet/IP enabled control systems.

Integrate your Notifier fire panels into your BACnet client device or system (SCADA, BMS, PLC, HMI, TouchPanels…).

Monitor & Control your network of Notifier fire panels remotely from your Control Center using any commercial SCADA or monitoring software with BACnet/IP driver.

IntesisBox allows BACnet/IP communication, acting as a server, allowing polling or subscription requests (COV)*.*

IntesisBox connects to the RS232 port of the Notifier panel, either through the RS232 port of the mother board, or through the isolated ISO-RS232 port (optional card).

Monitoring of the Notifier elements (detectors, outputs…) through independent BACnet objects. The value in the object indicating the state of the panel's element associated is fully configurable. Commands toward the panel are also supported (reset, silence, test elements…).

Fixed BACnet object IDs mapping, the object number identifies the element into the Notifier panel. Simple configuration, no point's mapping configuration is needed, just the communication parameters (IP address, baud rate…). One full ID3000 panel capacity is supported.
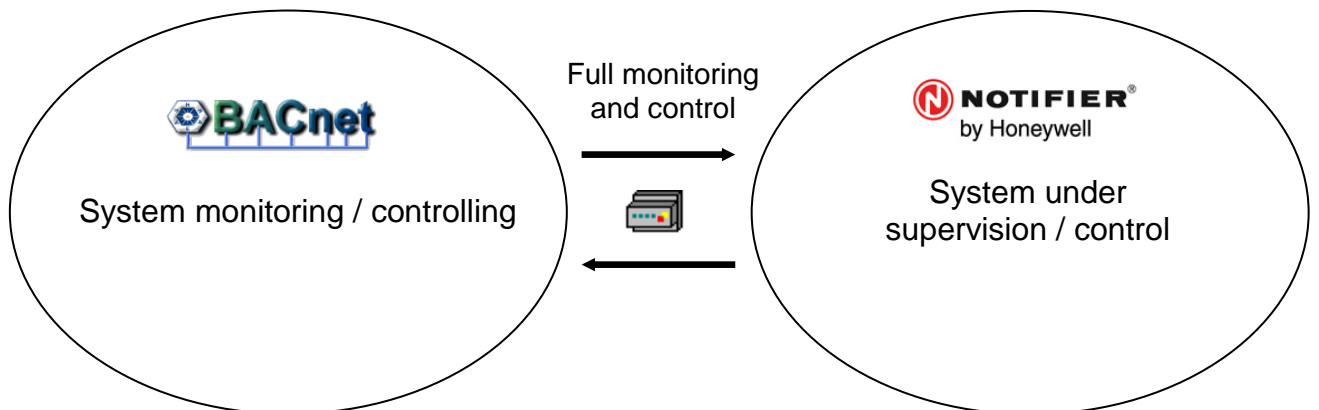
IntesisBox BACnet/IP Server series are configured using *LinkBoxBacnet,* a software tool for windows™ which is supplied along with the purchase of IntesisBox with no additional cost. *The user interface of LinkBoxBacnet allows simulating the values of the BACnet objects without the need to be physically connected to the panel, very useful while in commissioning phase.*

URL | http://www.intesis.com
email | info@intesis.com
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Description

<table>
<tr>
<td colspan="2">IntesisBox BACnet/IP Server for integration of
NOTIFIER ID3000 / ID3002 / ID50 / ID60 fire panels</td>
</tr>
<tr>
<td>Order Code</td>
<td>Description</td>
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<tr>
<td>IBOX-BAC-NID3000

</td>
<td>

This gateway allows integrating the Notifier panel through BACnet/IP protocol. The gateway acts as a BACnet server device. Commands toward the panel are allowed. Immediate response, operation based on events.

Main features
- Software for configuration and test is supplied with the gateway.
- Through the user interface, it is allowed to simulate the status of the BACnet objects without the need to be physically connected to the panel.
- Allows to be mounted on DIN rail, wall or desktop.
- Power from 9 to 30Vdc or 24Vac

BACnet features
- BACnet ASHRAE 135 – 2001 Annex J - BACnet/IP protocol.
- Parameters configurable: IP address, device instance number, port, etc.
- BACnet objects supported: Analog input, Analog output (*present value* property).
- Every object contains the information of a single element of the panel.
- Fixed object IDs mapping, the object number identifies the element.

Notifier features
- Capacity: 1 to 8 loops (depends on the panel).
- Detectors: 1 to 99 per loop (depends on the panel).
- Modules: 1 to 99 per loop (depends on the panel).
- 1 to 255 zones (depends on the panel).
- 15 general states of the panel in independent BACnet objects.
- Indication of communication error with the panel.
- Supports protocols full/duplex (panel main board) and half/duplex (opto-isolated ISO RS232 board, recommended).
- Simple configuration: COM, baud rate, etc.
- Each detector, module and zone is offered in an independent BACnet object.
- The value offered per each BACnet object, according to each possible state of the panel's element associated, is configurable through a point's relation table. This allows representing different states of the element with a single value in the BACnet object, and even ignoring certain undesired states.
- Commands toward the panel are allowed, like reset, silence, etc for the panel and activate/deactivate elements and put them into test mode.

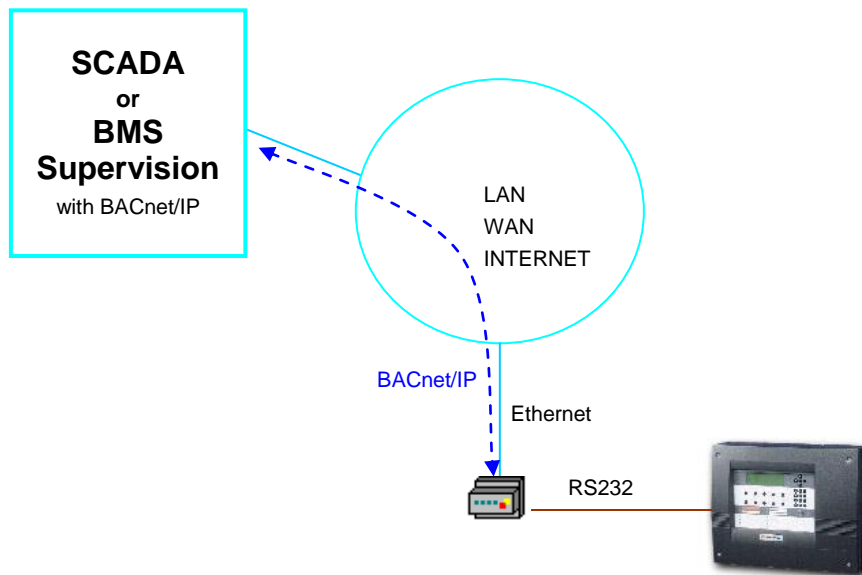</td>
</tr>
</table>

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Sample applications

Integration of any Notifier ID3000 series panel into BACnet control systems.

BACnet/IP control system:

- Building Automation.
- SCADA.
- HMI
- TouchPanels
- Programmable Logic Controllers (PLC)
- ...

Notifier ID 3000 series panels:

- Detectors.
- Modules.
- Zones
- ...

Full monitoring and control

System monitoring / controlling

System under supervision / control

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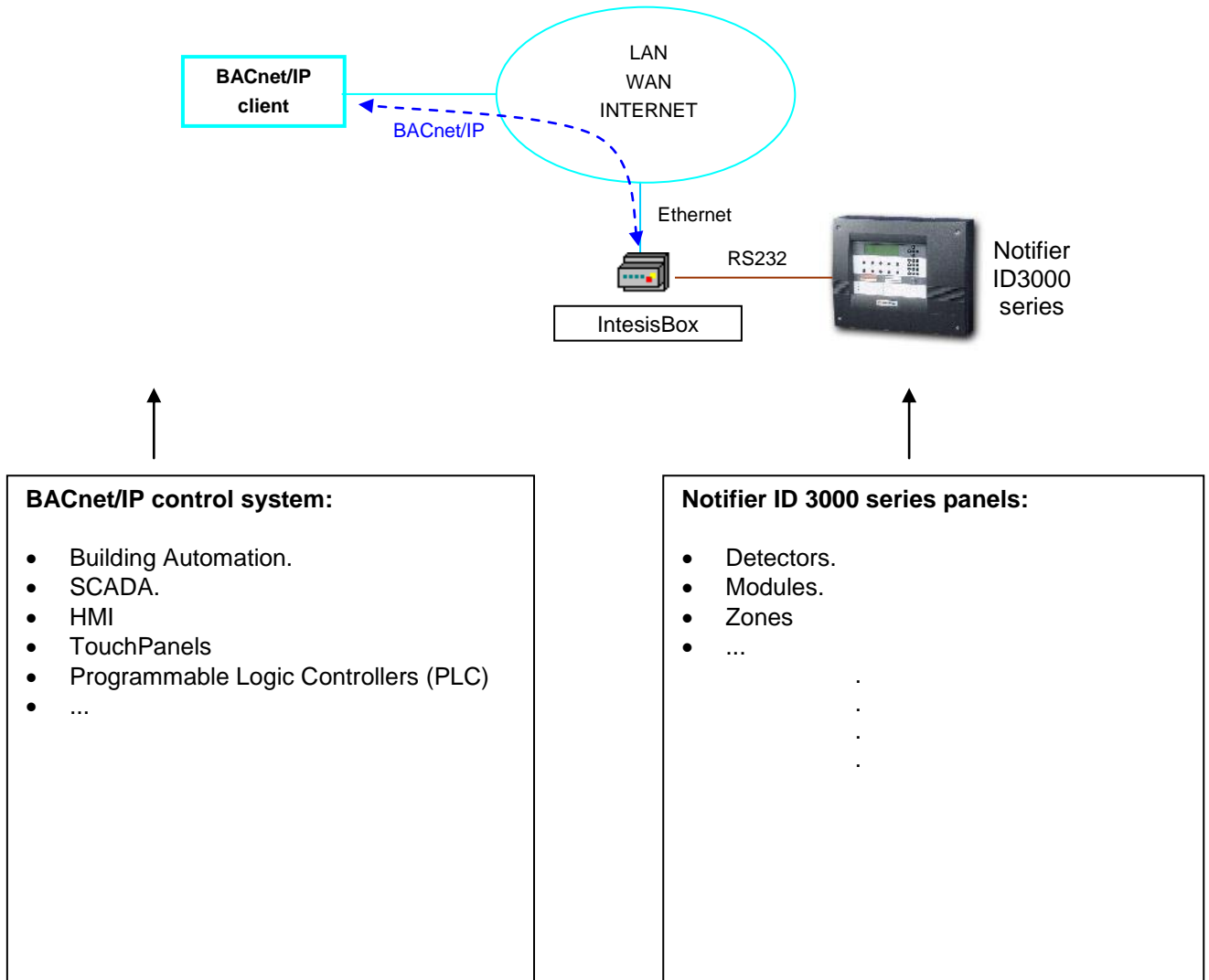
Typical application

Monitor & Control of a network of NOTIFIER fire panels remotely from a Control Center using any commercial SCADA or monitoring software with BACnet/IP client driver.

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BACnet interface of IntesisBox

BACnet interface	
Device type	Server
BACnet protocols supported	BACnet IP, (Annex J)
Interactivity with BACnet system	• Point's Read/Write allowed. • Subscription requests (COV) allowed.

Specifications

BACnet Conformance Class Supported: Class 3
Data Link Layer Option: BACnet IP, (Annex J)

Segmented Requests/Responses Not Supported

BACnet Standard Application Services Supported and more details are explained in BACnet IP Server KNX PICS (protocol implementation conformance statement)
http://www.intesis.com/pdf/IntesisBox_BACnet_IP_Server_NID3000_PICS.pdf

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Notifier interface of IntesisBox
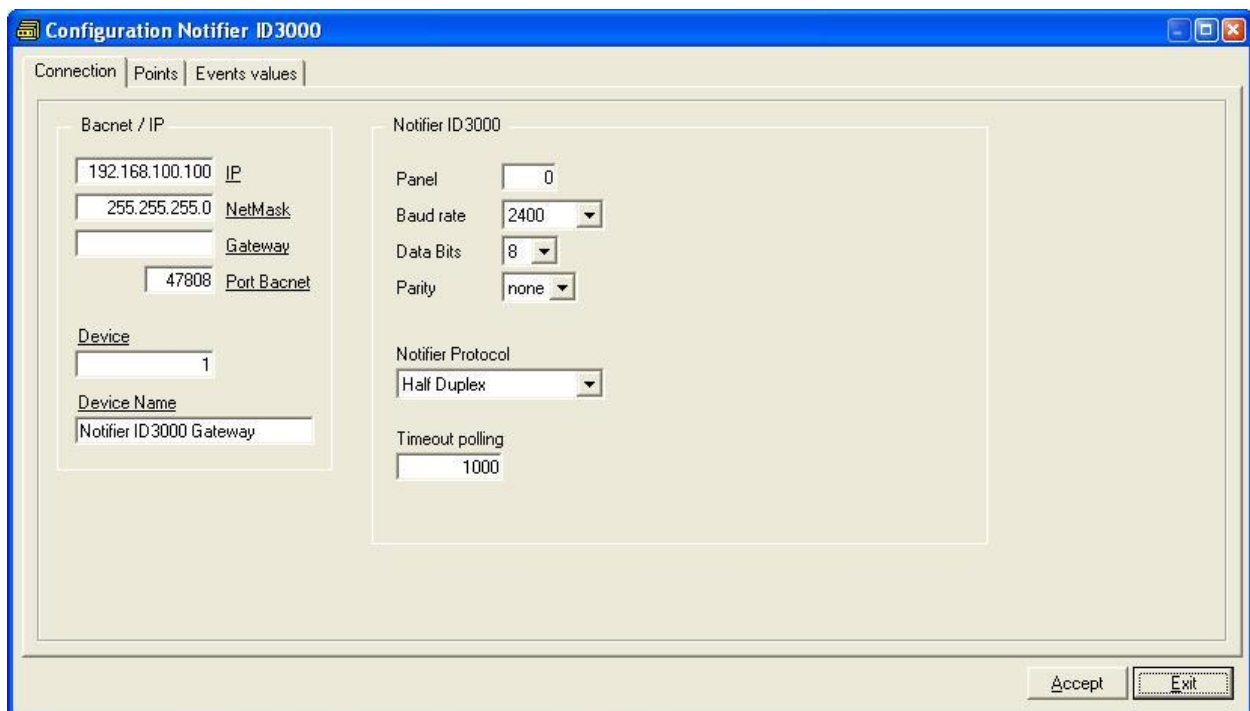
General features

- Supports protocols full/duplex (panel main board) and half/duplex (opto-isolated ISO RS232 board, recommended).

- Simple configuration: COM, baud rate, etc.

- Each detector, module and zone is offered in an independent BACnet object.

- Indication of communication error with the panel.

- The value offered per each BACnet object, according to each possible state of the element associated, is configurable. This allows representing different states of the element with a single value in the BACnet object, and even ignoring certain undesired states.

- Commands toward the panel are allowed (i.e. reset, silence… of the panel, and activate/deactivate elements or put them into test mode).

Capacity

- Loops: 1 to 8 (the number used will depend on the panel).

- Detectors: 1 to 99 per loop (the number used will depend on the panel).

- Modules: 1 to 99 per loop (the number used will depend on the panel).

- Zones: 1 to 255 (the number used will depend on the panel).

- 15 general states of the panel in independent BACnet objects.

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Configuration tool

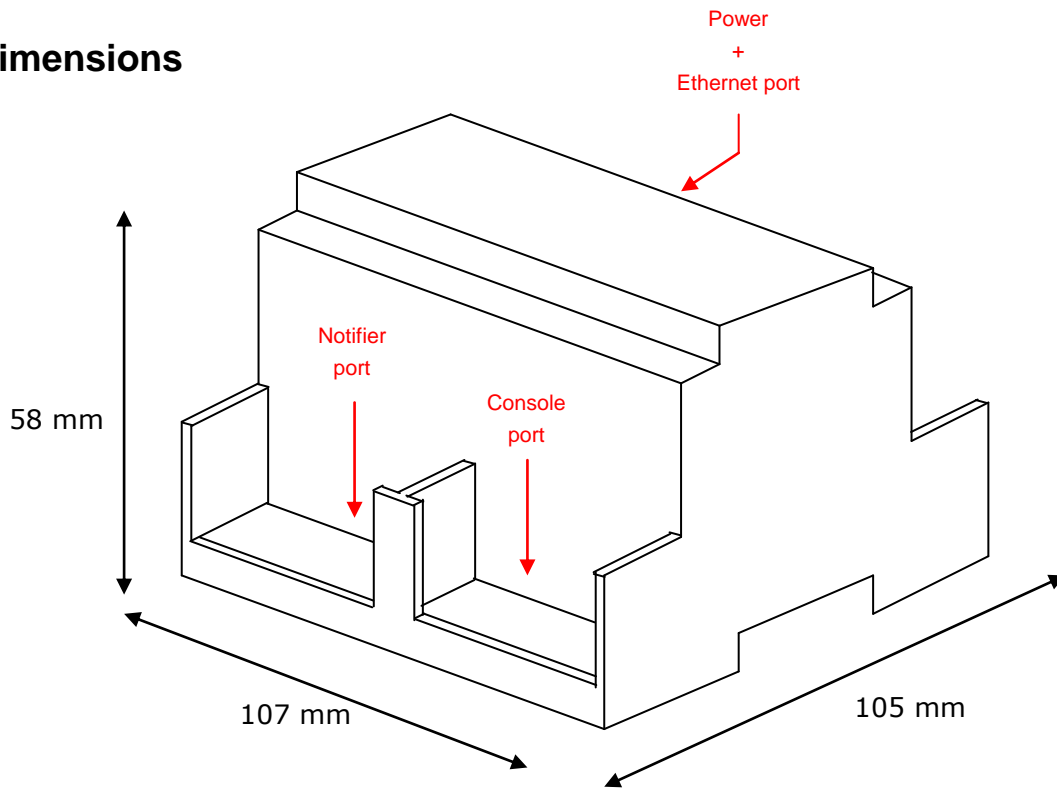| LinkBoxBacnet	• Visual engineering tool, easy of use, for gateway's configuration and supervision compatible with Microsoft Windows operating systems, supplied with the gateway with no additional cost.
	• Multi-window tool allowing to supervise simultaneously the communication activity with both protocols (systems), real time values for all the signals allowing to modify any value (very useful for test purposes), console window showing debug and working status messages, and configuration windows to configure all the gateway's parameters and signals.
	• Allows configuring the gateway's parameters while in off-line (not connected to the gateway).
	• Connection to the gateway for download the configuration and supervision by using serial COM port of the PC (serial cable supplied with the gateway).
	• Allows configuring all the external protocols available for IntesisBox® BACnet/IP Server series.
	• Upgrades for this software tool available free of charge whenever a new protocol is added to the IntesisBox® BACnet/IP Server series.
	• Multi-project tool allowing having in the engineer's PC the configuration for all the sites with different IntesisBox® BACnet/IP Server series gateways.
	• Multi-language tool, all the language-dependent strings are in a plain text file (tab separated) for easy modification or addition of new languages.
	• A list of system commands is available to send to the gateway for debugging and adjust purposes (Reset, Date/time consultation/adjust, Firmware version request…).

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Mechanical & Electrical characteristics

Enclosure	Plastic, type PC (UL 94 V-0). Dimensions: 107mm x 105mm x 58mm.
Color	Light Grey. RAL 7035.
Power	9 to 30Vdc +/-10% 1.4W. 24Vac +/-10% 1.4VA. Plug-in terminal block for power connection (2 poles).
Mounting	Wall. DIN rail EN60715 TH35.
Notifier port	1 x Serial RS232 (DB9 male DTE).
BACnet/IP port	1 x Ethernet 10BT RJ45.
LED indicators	1 x Power. 2 x Serial port (Notifier) activity (Tx, Rx). 2 x Ethernet port link and activity (LNK, ACT).
Console port	RS232. DB9 female connector (DCE).
Configuration	Via console port.[1]
Firmware	Allows upgrades via console port.
Operational temperature	0°C to +70°C
Operational humidity	5% to 95%, non condensing
Protection	IP20 (IEC60529).
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	CE

[1] Standard cable DB9male - DB9female 1,8 meters long is supplied with the device for connection to a PC COM port for configuring and monitoring the device. The configuration software, compatible with Windows® operating systems, is also supplied.

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Dimensions

Power
+
Ethernet port

Notifier
port

Console
port

58 mm

107 mm

105 mm

Recommended available space for its installation into a cabinet (wall or DIN rail mounting), with space enough for external connections

100 mm

115 mm

130 mm

Intesis software

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