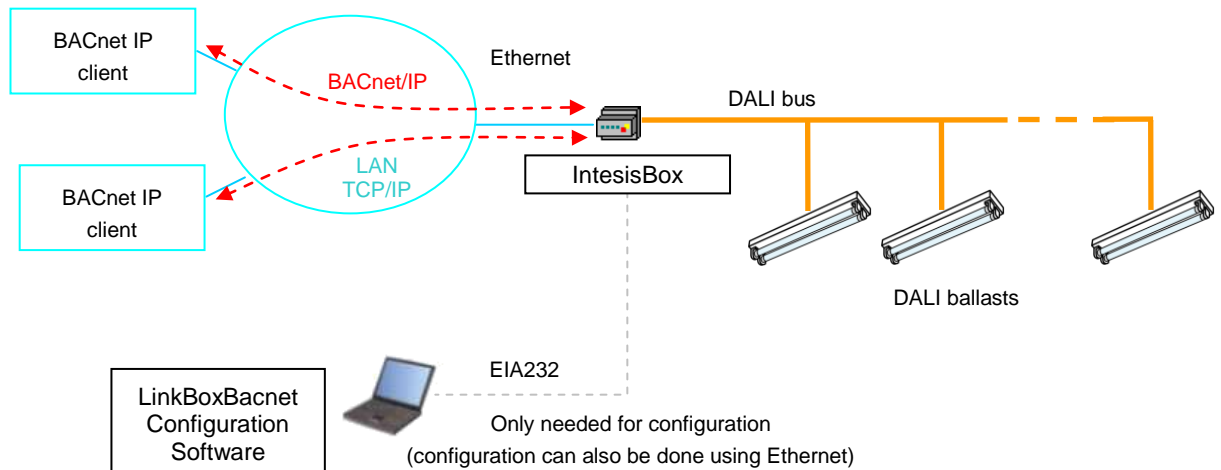




IntesisBox®

BACnet/IP Server - DALI

Gateway for integration of DALI ballasts into BACnet/IP networks



IntesisBox is a DALI master device, monitoring and controlling DALI ballasts connected to a DALI bus (up to 64 ballasts can be integrated within a single channel). IntesisBox also supplies the necessary power for the DALI Bus.

BACnet client devices connected to the BACnet/IP network can read IntesisBox's internal datapoints by continuous polling or by means of BACnet subscription requests (COV). DALI ballasts can be monitored and controlled from BACnet using standard BACnet objects.

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.

BACnet interface of IntesisBox

BACnet Interface	
Device type	Server
BACnet physical layer / media	BACnet/IP (accessible through Ethernet)
BACnet configurable parameters	<ul style="list-style-type: none"> • IP address. • Subnet mask. • Default gateway address. • BACnet port. • Device name. • Device instance number.
Interactivity with the BACnet system	<ul style="list-style-type: none"> • Internal point's Read / Write allowed. • Subscription requests (COV) allowed. <p><i>For more details see BACnet interface specifications below.</i></p>

BACnet interface 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_DALI_PICS.pdf

Existing BACnet objects/properties for each ballast

Object name	Object type	Property	Description
Dali Sts	Analog Input	Present Value	Byte value representing the status of the ballast
Dali PwrLvl	Analog Input	Present Value	Actual power level on the ballast, periodically read by IntesisBox (0...100%)
Dali PwrSet	Analog Output	Present Value	Object/property allowing to set the power level control of the ballast (0...100%)
Dali Cmd	Analog Output	Present Value	Object/property allowing to send DALI commands to the applying ballast (enumeration-based): <ul style="list-style-type: none"> • Off, • 100% • Step Up • Step Down • Go To Scene X • Store Current Level as Scene X • Remove Scene X • Set Fade Rate • Set Fade Time • Configure Min Level • Configure Max Level • Configure Power-on Level • Configure System failure Level

Existing BACnet objects/properties for each group (and broadcast/all ballasts too)

Object name	Object type	Property	Description
Dali PwrSet	Analog Output	Present Value	Object/property allowing to set the power level control of the group (0...100%)
Dali Cmd	Analog Output	Present Value	Object/property allowing to send DALI command to the applying group (enumeration-based): <ul style="list-style-type: none"> • Off, • 100% • Step Up • Step Down • Go To Scene X • Store Current Level as Scene X • Remove Scene X • Set Fade Rate • Set Fade Time • Configure Min Level • Configure Max Level • Configure Power-on Level • Configure System failure Level

DALI interface of IntesisBox

DALI Interface	
DALI Bus	Supplies power to the DALI bus (+15V +/-2%) Max current drain is 250mA. Opto-isolated from the rest of ports of IntesisBox.
Number of ballasts	1 channel / 64 ballasts
Parameters that can be configured in each ballasts using IntesisBox	All of those defined in the DALI standard <ul style="list-style-type: none">• Short Address• Min Level• Max Level• Power-on Level• System failure Level• Fade rate• Fade time• Group 0..15 membership• Scene 0..15 preset value

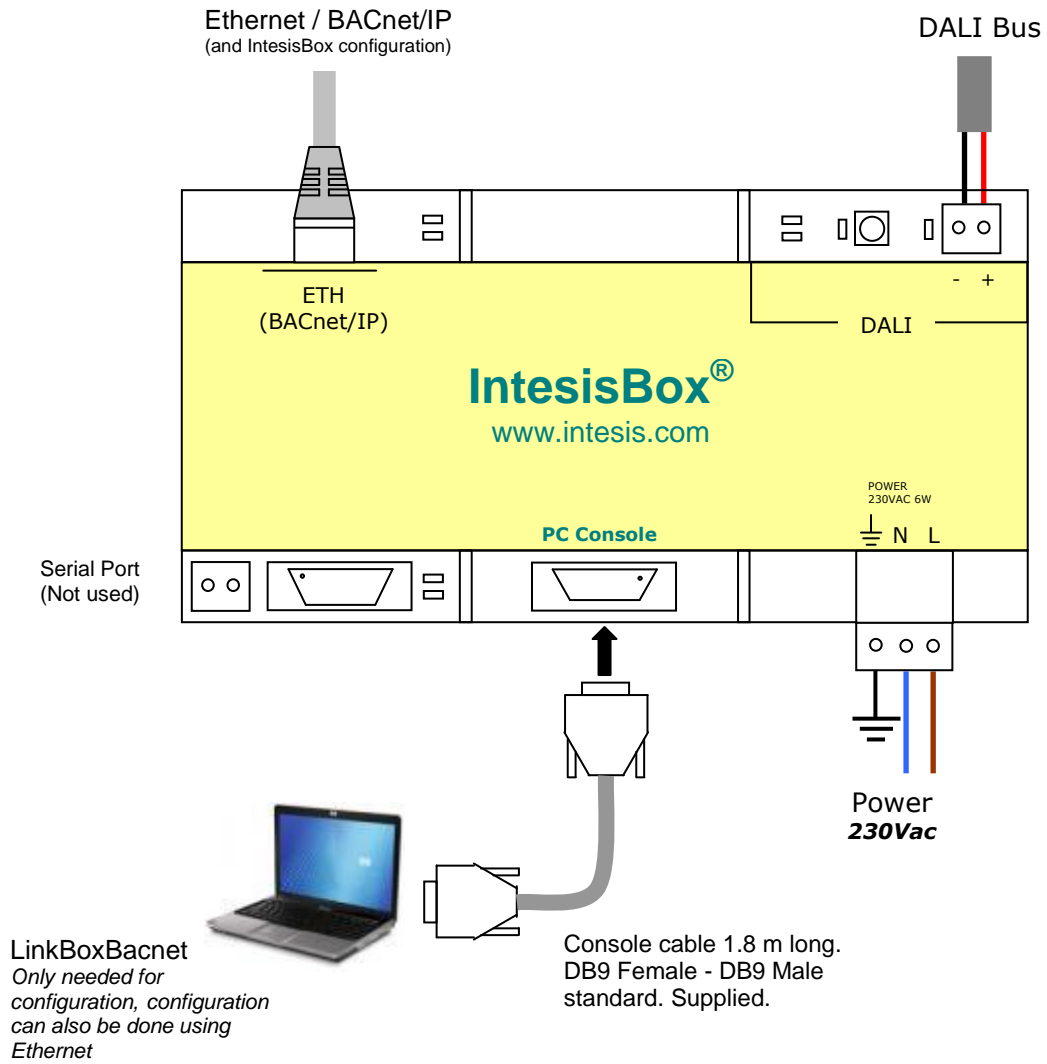
Mechanical & Electrical characteristics

Enclosure	Plastic, type PC (UL 94 V-0). Dimensions: 159mm 105mm x 58mm.
Color	Light Grey / RAL 7035.
Supply Voltage	230Vac +/-10% 6W (3-pole plug-in terminal block – line, neutral and earth)
Mounting	Wall. DIN rail EN60715 TH35.
DALI bus power source	15Vdc +/-2% 250mA. (DALI bus is powered from IntesisBox)
DALI port	1 x DALI electrically isolated (2-pole plug-in terminal block).
Ethernet port (BACnet/IP, device config)	1 x Ethernet 10BT RJ45.
LED indicators	1 x Power indicator. 2 x DALI activity (Tx, Rx). 2 x Ethernet link & activity (LNK, ACT). 1 x DALI bus power 1 x DALI test ¹
Push buttons	1 x DALI test ¹
Console port	EIA232. DB9 female connector (DCE).
Configuration	Via Ethernet or serial console port. ²
Firmware	Allows upgrades via console port.
Operational temperature	0°C to +60°C
Operational humidity	25-90% at 50°C, non condensing
Protection	IP20 (IEC60529).
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	CE

¹ DALI test push-button and LED are meant to perform a quick test of your DALI line and connected ballasts.

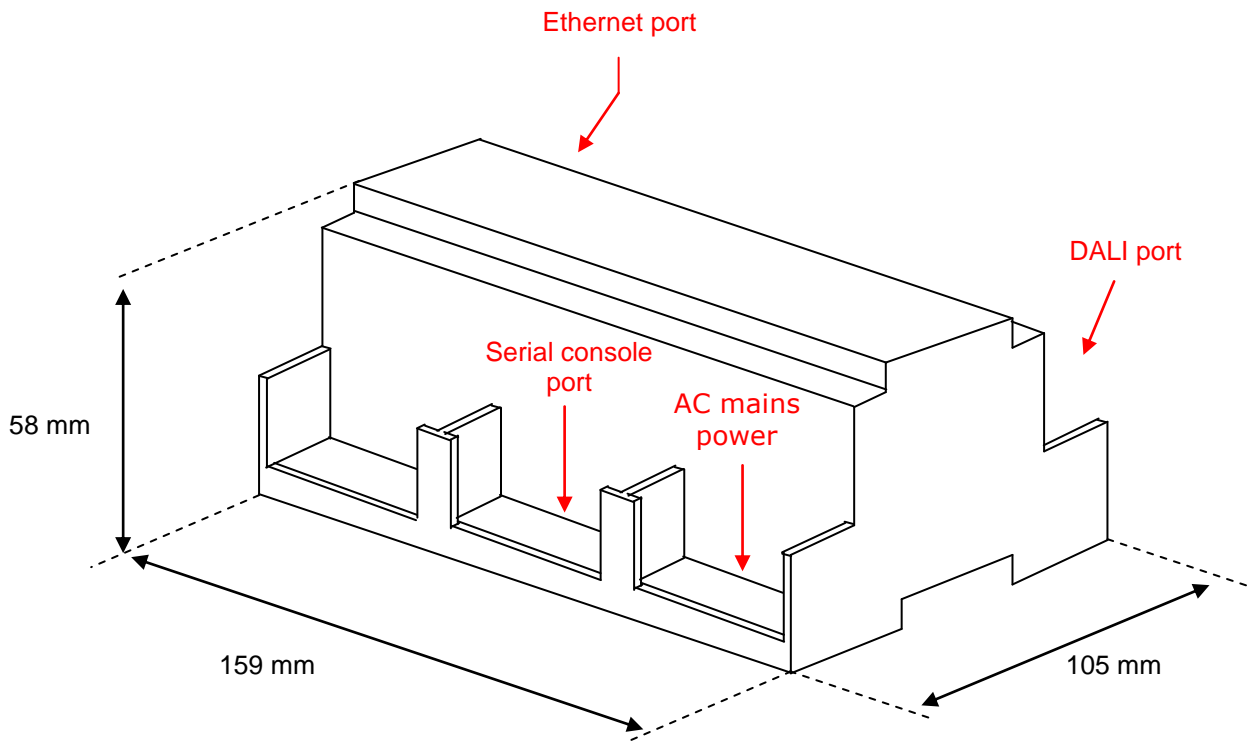
² Standard cable DB9 male-DB9 female 1,8 meters long is supplied with the device for connection to a PC COM port for configuring and monitoring the device using the serial port (Ethernet is also possible). The configuration software, compatible with Windows® operating systems, is also supplied.

Connections



Dimensions

External dimensions



Free space recommended in the install location of the device, with spacing enough for external connections.

