

# IntesisBox<sup>®</sup>



The DAIKIN logo, featuring a blue diagonal slash followed by the word "DAIKIN" in blue capital letters, all contained within a white rounded rectangle.

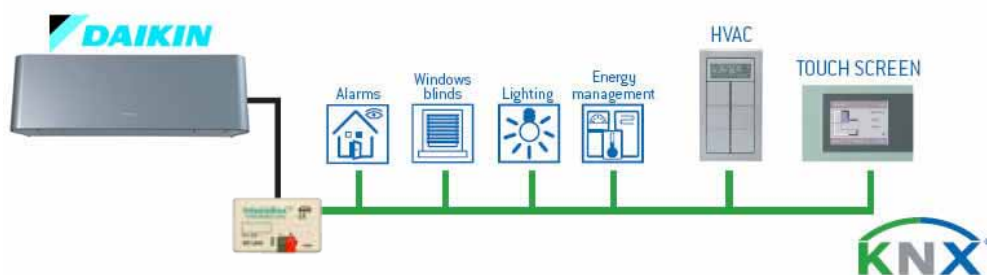
## General catalogue 2013

KNX · MODBUS · BACNET · LONWORKS · ENOCEAN · ASCII

ENGLISH

## DK-AC-KNX-1

IntesisBox® DK-AC-KNX-1 allows monitoring and control, fully bi-directionally, all the operational parameters of DAIKIN air conditioners from KNX installations. Compatible with Domestic Series manufactured by DAIKIN.



### Specifications

- Bidirectional: Monitoring and Control
- Configuration from ETS
- Direct connection to KNX bus and to the AC indoor unit
- No external power supply required
- Small size (WxHxD): 59 x 36 x 21 mm

### Main features

- Easy installation inside the AC indoor unit. Cable to connect to S21 connector supplied.
- Great integration flexibility. Configured directly from the ETS.
- Special communication objects for increasing comfort and energy savings: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller,...
- Virtual temperature functionality. Useful when an external ambient temperature reference is required (KNX sensor or thermostat) or when the heating and AC unit need to be controlled from the same KNX thermostat.
- Simultaneous control from KNX and the Air Conditioner IR handset.

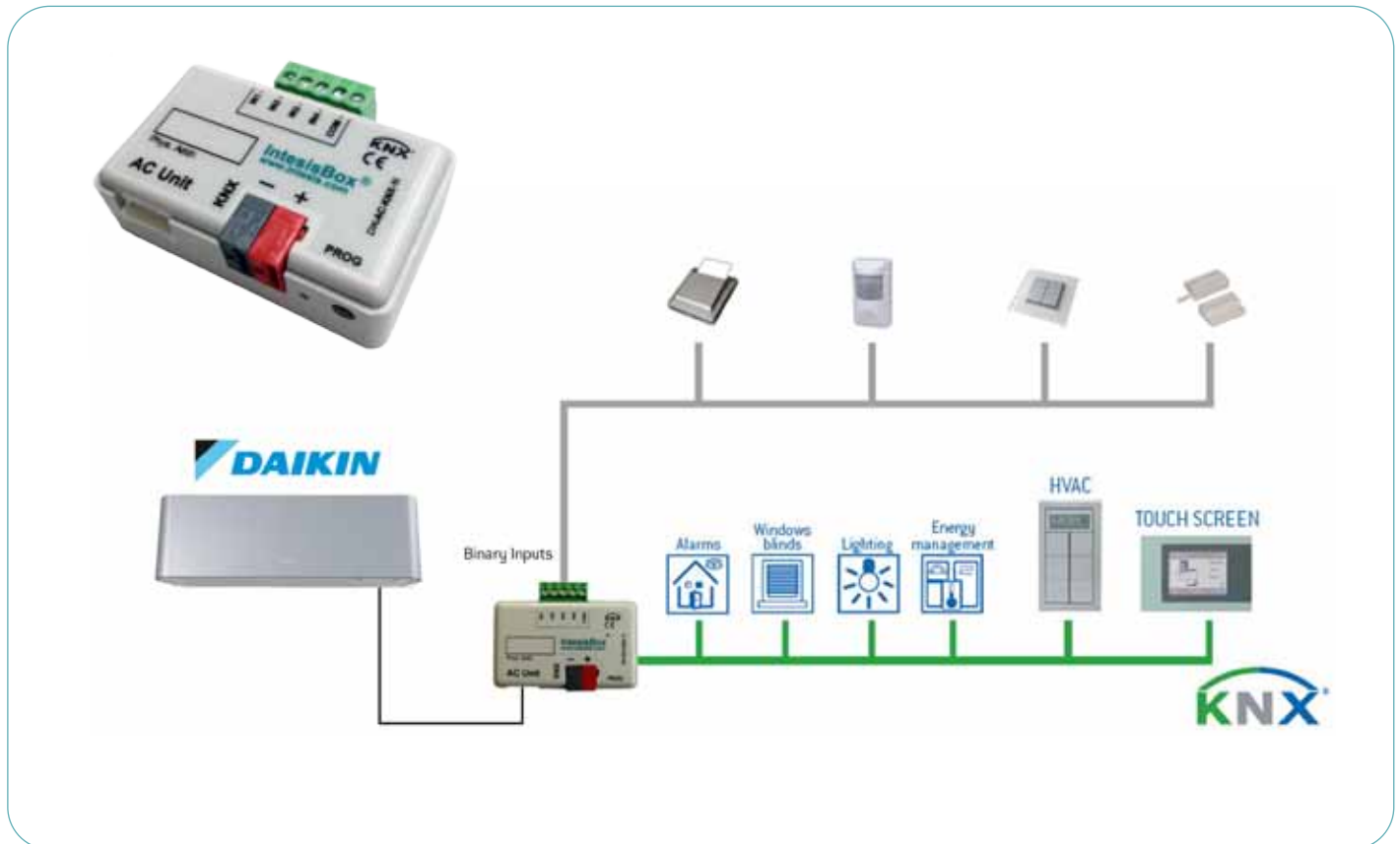
### Info

Datasheet : [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-KNX-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-KNX-1_datasheet_eng.pdf)

Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-xxx-1_AC_Compatibility.pdf)

## DK-AC-KNX-1i

IntesisBox® DK-AC-KNX-1i allows monitoring and control, fully bi-directionally, of all the operational parameters of DAIKIN air conditioners from KNX installations. Compatible with Domestic Series manufactured by DAIKIN. 4 free-use binary inputs.



### Specifications

- Bidirectional: Monitoring and Control
- Configuration from ETS
- 4 binary inputs for potential-free contacts
- Direct connection to KNX bus and to the AC indoor unit
- Allows use of a KNX temperature sensor
- No external power supply required
- Small size (WxHxD): 59 x 45 x 21 mm

### Main features

- Easy installation inside the air conditioning indoor unit. Cable to connect to S21 connector supplied.
- Great integration flexibility. Configured directly from the ETS.
- Special communication objects for increasing comfort and energy savings: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller,...
- Virtual temperature functionality. Useful when an external ambient temperature reference is required (KNX sensor or thermostat) or when the heating and AC unit need to be controlled from the same KNX thermostat.
- Simultaneous control from KNX and the Air Conditioner IR handset.

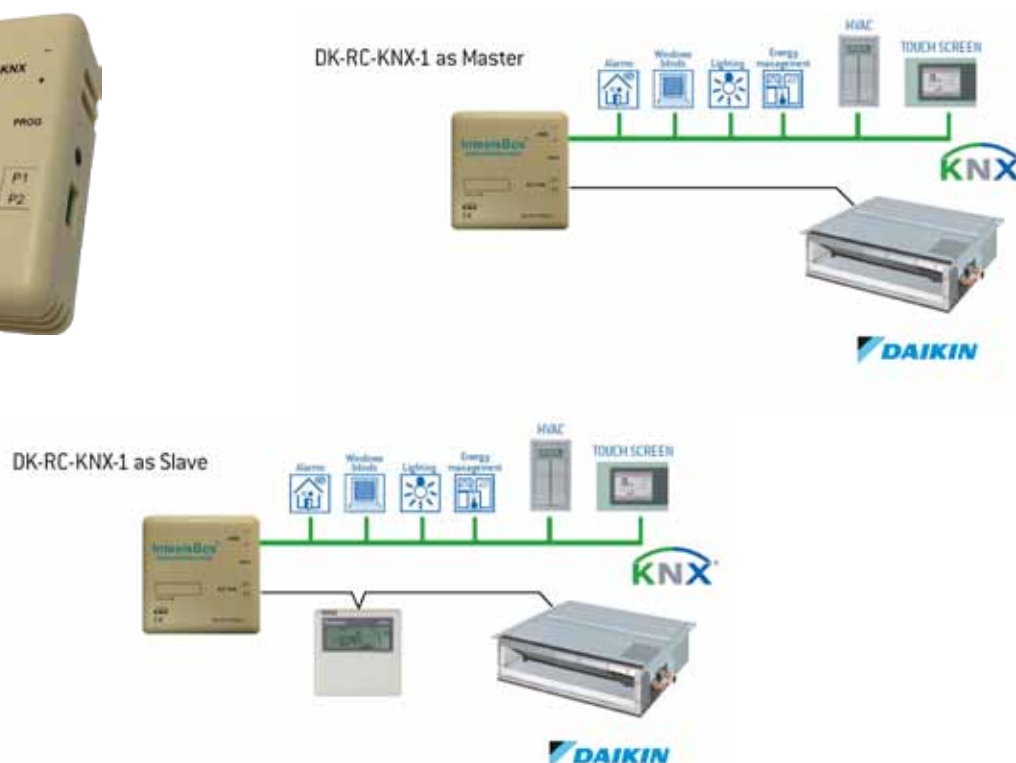
### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-KNX-1i\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-KNX-1i_datasheet_eng.pdf)

Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-xxx-1_AC_Compatibility.pdf)

## DK-RC-KNX-1

IntesisBox® DK-RC-KNX-1 gateway allows monitoring and bidirectional control of all the parameters and functionality of DAIKIN air conditioners from KNX installations. Compatible with SKY Air & VRV Series manufactured by DAIKIN.



### Specifications

- Bidirectional: Monitoring and Control
- Configuration from ETS
- Direct connection to KNX bus and to the AC indoor unit
- Connection type: 2 wires without polarity.
- Total maximum distance: 500 m.
- No external power supply required
- Small size (WxHxD): 71 x 71 x 27 mm

### Main features

- Easy installation as Slave or Master in parallel with Daikin remote controllers.
- Great integration flexibility. Configured directly from the ETS.
- Special communication objects for increasing comfort and energy savings: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller,...
- Virtual temperature functionality. Useful when an external ambient temperature reference is required (KNX sensor or thermostat) or when the heating and AC unit need to be controlled from the same KNX thermostat.
- Simultaneous control from KNX and the Air Conditioner Remote Controller.

### Info

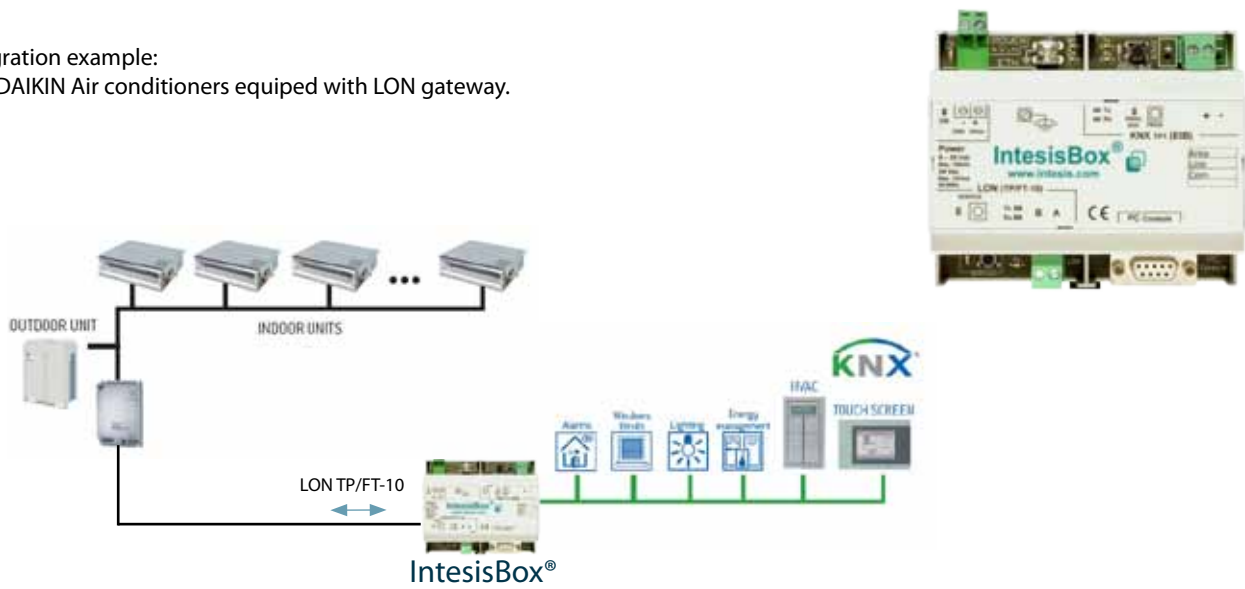
Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-KNX-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-KNX-1_datasheet_eng.pdf)

Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf)

## IBOX-KNX-LON

IntesisBox® IBOX-KNX-LON gateway has been specially designed to allow monitoring and bidirectional control of all the parameters and functionality of systems and equipment with LonWorks® connectivity from KNX installations.

Integration example:  
VRV DAIKIN Air conditioners equipped with LON gateway.



### Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to KNX bus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

### Models available

- IBOX-KNX-LON-100 (Maximum 100 control points and 128 LON devices)
- IBOX-KNX-LON-A (Maximum 500 control points and 128 LON devices)
- IBOX-KNX-LON-B (Maximum 4000 control points and 128 LON devices)

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_KNX\\_LON\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_KNX_LON_datasheet_eng.pdf)

### Main features

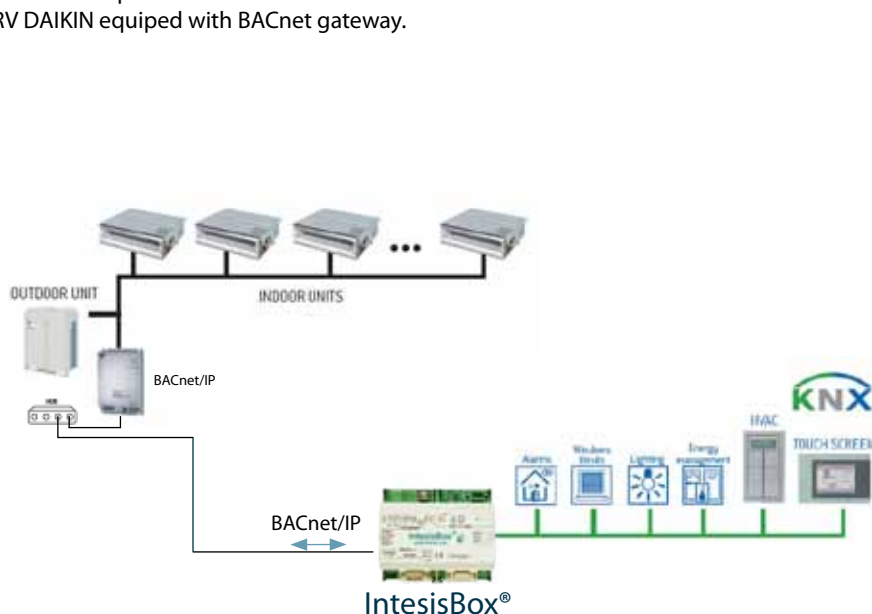
- Easy installation. Direct connection to LONWorks devices through TP/FT-10 (2 wire) connection
- Great integration flexibility. Thanks to LinkBoxEIB supplied software. No bindings needed thanks to continuous polling readout. Access through physical address (Neuron-Id) or subnet node (commissioned devices) possible. LON expertise or commission tool not required.
- Advanced integration for centralized AC systems equipped with Lonworks interfaces, including meters, PLC's coolers, etc.



## IBOX-KNX-BAC

IntesisBox® IBOX-KNX-BAC gateway has been specially designed to allow monitoring and bidirectional control of all the parameters and functionality of systems and equipment with BACnet/IP connectivity from KNX installations.

Integration example:  
AC VRV DAIKIN equipped with BACnet gateway.



### Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to KNX bus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

### Models available

- IBOX-KNX-BAC-100 (Maximum 100 control points and 16 BACnet/IP devices)
- IBOX-KNX-BAC-A (Maximum 500 control points and 16 BACnet/IP devices)
- IBOX-KNX-BAC-B (Maximum 4000 control points and 16 BACnet/IP devices)

### Info

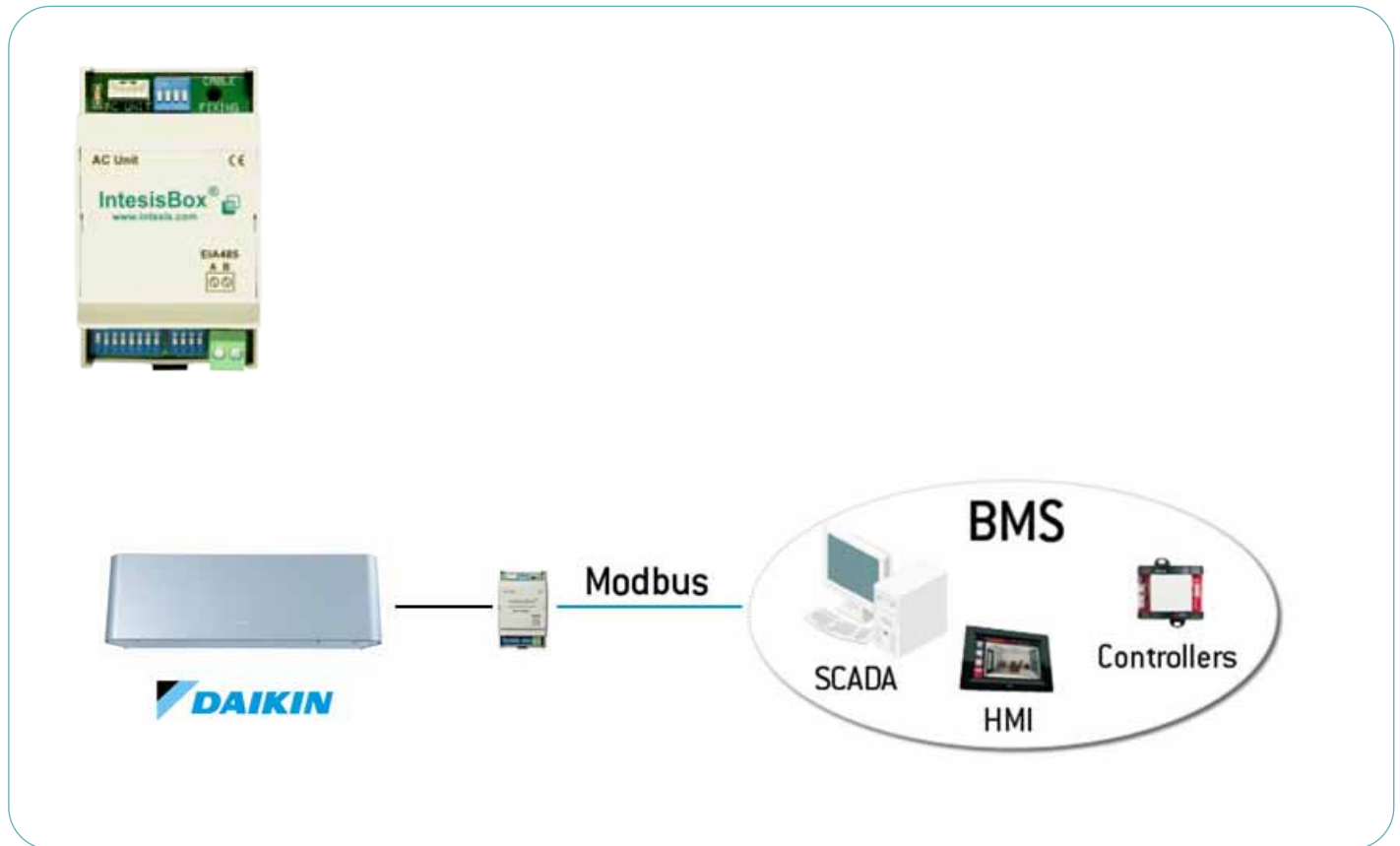
Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_KNX\\_Bacnet\\_IP\\_Client\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_KNX_Bacnet_IP_Client_datasheet_eng.pdf)

### Main features

- Easy installation. Direct connection to the BACnet/IP network.
- Great integration flexibility. IntesisBox® IBOX-KNX-BAC is a BACnet/IP client that reads/writes points of other BACnet/IP devices. Read values kept in IntesisBox® memory to be used when needed by the KNX system.
- Advanced integration for centralized AC systems equipped with BACnet/IP interfaces, including meters, PLC's, HMI etc.

## DK-AC-MBS-1

The DK-AC-MBS-1 interface allows a complete and natural integration of Daikin air conditioners into ModBus RTU (RS-485) networks. Compatible with Domestic Series manufactured by DAIKIN.



### Specifications

- Bidirectional: Monitoring and Control
- Fast and easy installation
- Direct connection to RS-485 bus and the AC indoor unit
- Configuration from both on-board DIP-switches and MODBUS RTU.
- No external power supply required
- Small size (WxHxD): 93 x 53 x 58 mm

### Main features

- Easy installation. Cable for S21 connector supplied.
- Great integration flexibility.
- Special communication objects for increasing comfort and energy savings: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller,...
- Simultaneous control from ModBus and the Daikin Remote controller.

### Info

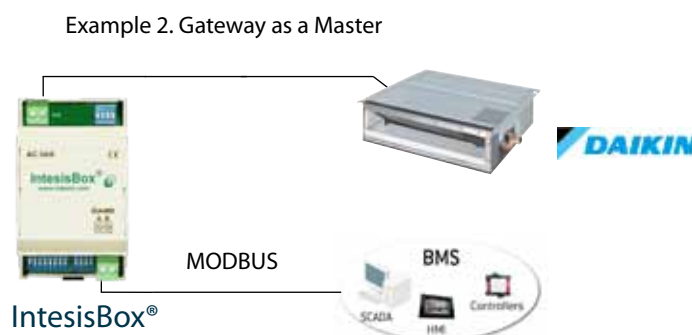
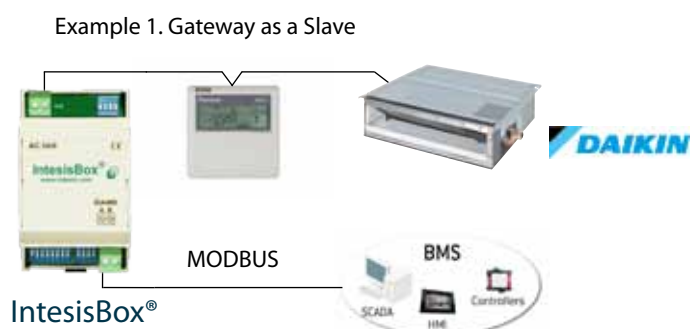
Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-MBS-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-MBS-1_datasheet_eng.pdf)

Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-xxx-1_AC_Compatibility.pdf)

## DK-RC-MBS-1

IntesisBox® DK-RC-KNX-1 gateway allows monitoring and bidirectional control of all the parameters and functionality of DAIKIN Air conditioners from ModBus installations.

Compatible with SKY & VRV Series manufactured by DAIKIN.



### Specifications

- Bidirectional: Monitoring and Control
- Fast and easy installation
- Direct connection to RS-485 bus and the AC indoor unit
- Configuration from both on-board DIP-switches and MODBUS registers.
- No external power supply required
- Small size (WxHxD): 71 x 71 x 27 mm

### Main features

- Easy installation as Slave or Master in parallel with Daikin remote controllers.
- Great integration flexibility. Easy integration with basic parameters up to complete monitoring and control of the AC unit operation is possible.
- Special communication objects for increasing comfort and energy savings: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller,...
- Simultaneous control from ModBus and the Daikin Remote controller.

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-MBS-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-MBS-1_datasheet_eng.pdf)

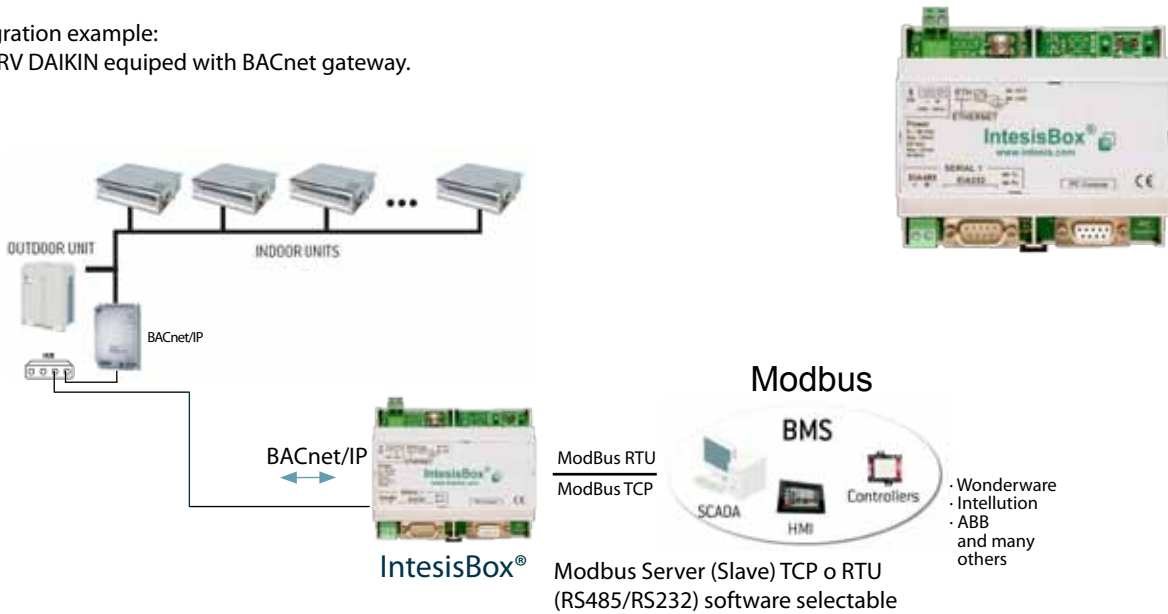
Compatibility list available at [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf)



# IBOX-MBS-BAC

IntesisBox® IBOX-MBS-BAC gateway have been specially designed, to allow monitoring and bidirectional control of all the parameters and functionality of systems and devices with BACnet/IP connectivity from ModBus installations.

Integration example:  
AC VRV DAIKIN equipped with BACnet gateway.



## Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to BACnet and ModBus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

## Models available

- IBOX-MBS-BAC-100 (Maximum 100 control points and 16 BACnet/IP devices)
- IBOX-MBS-BAC-A (Maximum 500 control points and 16 BACnet/IP devices)
- IBOX-MBS-BAC-B (Maximum 3000 control points and 16 BACnet/IP devices)

## Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_Modbus\\_Server\\_Bacnet\\_IP\\_Client\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_Modbus_Server_Bacnet_IP_Client_datasheet_eng.pdf)

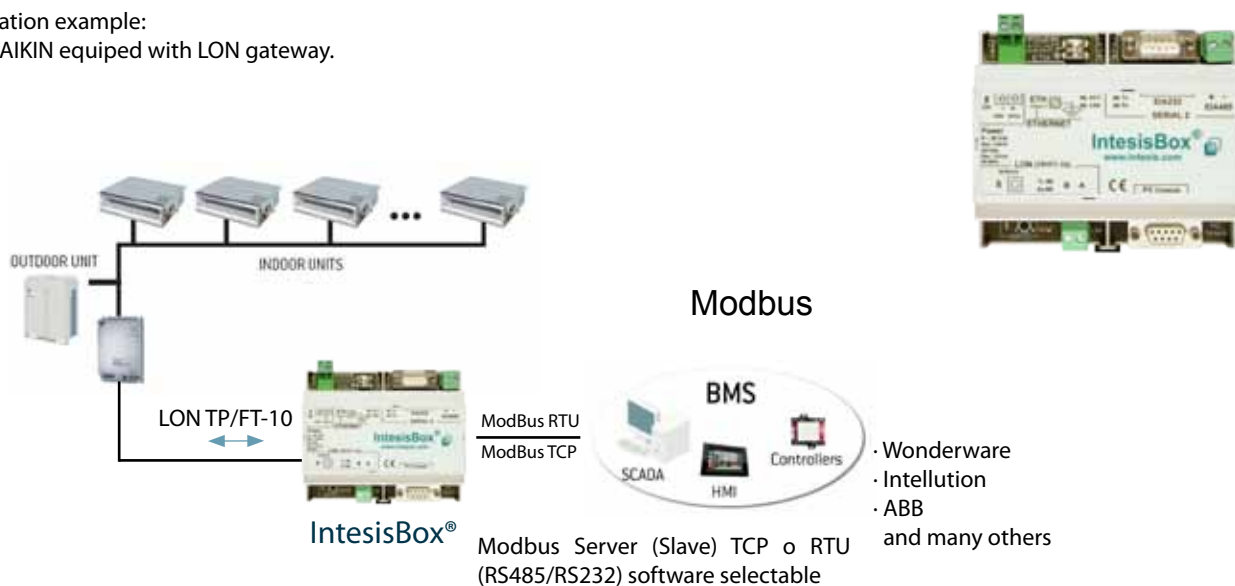
## Main features

- Easy installation. Connection to the BACnet/IP network through Ethernet.
- Great integration flexibility. IntesisBox® IBOX-KNX-BAC is a BACnet/IP client that reads/writes points of other BACnet/IP devices, using continuous polling or subscription (COV). Supports both ModBus TCP or RTU (RS232 or RS485). ModBus registers are configured by supplied software LinkBoxMB.
- Advanced integration for centralized AC systems equipped with BACnet/IP interfaces, as Daikin, Mitsubishi Heavy, LG, etc. also integrating fan-coil controllers, meters, PLC's, HMI, etc.

## IBOX-MBS-LON

IntesisBox® IBOX-MBS-LON gateway has been specially designed to allow monitoring and bidirectional control of all the parameters and functionality of systems and equipment with LonWorks® connectivity from ModBus installations.

Integration example:  
VRV DAIKIN equipped with LON gateway.



### Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to LON and ModBus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

### Models available

- IBOX-MBS-LON-100 (Maximum 100 control points and 64 LON devices)
- IBOX-MBS-LON-A (Maximum 500 control points and 64 LON devices)
- IBOX-MBS-LON-B (Maximum 3000 control points and 128 LON devices)

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_Modbus\\_Server\\_LON\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_Modbus_Server_LON_datasheet_eng.pdf)

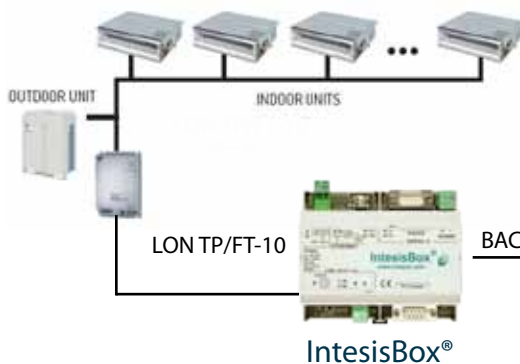
### Main features

- Easy installation. Direct connection to Lonworks devices with 2 wire (TP/FT-10) connection.
- Great integration flexibility. No bindings needed thanks to continuous polling readout. Access through physical address (Neuron-Id) or subnet node (commissioned devices) possible. LonMaker not required. Supports both ModBus TCP or RTU (RS232 or RS485). ModBus registers are configured by supplied software LinkBoxMB.
- Advanced integration for centralized AC systems equipped with Lonworks interfaces, as Daikin, Mitsubishi Heavy, LG, etc. also integrating fan-coil controllers, meters, PLC's, HMI, etc.

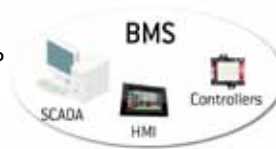
## IBOX-BAC-LON

IntesisBox® IBOX-BAC-LON gateway has been specially designed to allow monitoring and bidirectional control of all the parameters and functionality of systems and equipment with LonWorks® connectivity from BACnet/IP installations.

Integration example:  
VRV DAIKIN equipped with LON gateway.



BACnet/IP



- Wonderware
- Intellution
- ABB
- and many others

IntesisBox® IBOX-BAC-LON gateway can be read by subscription (COV) and polling.

### Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to LON and BACnet/IP
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

### Models available

- IBOX-BAC-LON-100 (Maximum 100 control points and 64 LON devices)
- IBOX-BAC-LON-A (Maximum 500 control points and 64 LON devices)
- IBOX-BAC-LON-B (Maximum 3000 control points and 128 LON devices)

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_BACnet\\_IP\\_Server\\_LON\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_BACnet_IP_Server_LON_datasheet_eng.pdf)

### Main features

- Easy installation. Direct connection to LONWorks devices through TP/FT-10 (2 wire) connection
- Great integration flexibility. Thanks to LinkBoxBAC supplied software. No bindings needed thanks to continuous polling readout. Access through physical address (Neuron-Id) or subnet node (commissioned devices) possible. LonMaker not required.
- Advanced integration for centralized AC systems equipped with Lonworks interfaces in BACnet/IP (Siemens, Honeywell, Delta Controls, Trend,...), also integrating fan-Coil controllers, meters, PLCs, HMI, etc.

## DK-AC-ENO-1 / DK-AC-ENO-1C

IntesisBox® DK-AC-ENO-1 / 1C gateways have been specially designed, in collaboration with Daikin, to allow monitoring and bidirectional control of all the parameters and functionality of Mitsubishi Electric air conditioners from EnOcean installations. Compatible with all the models of the Domestic Series manufactured by DAIKIN.



### Specifications

- Bidirectional: Monitoring and Control
- Multiple EnOcean EEP's supported
- Configurable advanced room control functionalities
- Repeater functionality available
- Direct connection to the AC indoor unit
- No external power supply required
- Small size (WxHxD): 71 x 71 x 27 mm

### Models available

- DK-AC-ENO-1 (EnOcean Freq: 868 MHz. Europe)
- DK-AC-ENO-1C (EnOcean Freq: 315 MHz. USA and Asia)

\*\* For other world locations contact your supplier

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-ENO-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-ENO-1_datasheet_eng.pdf)

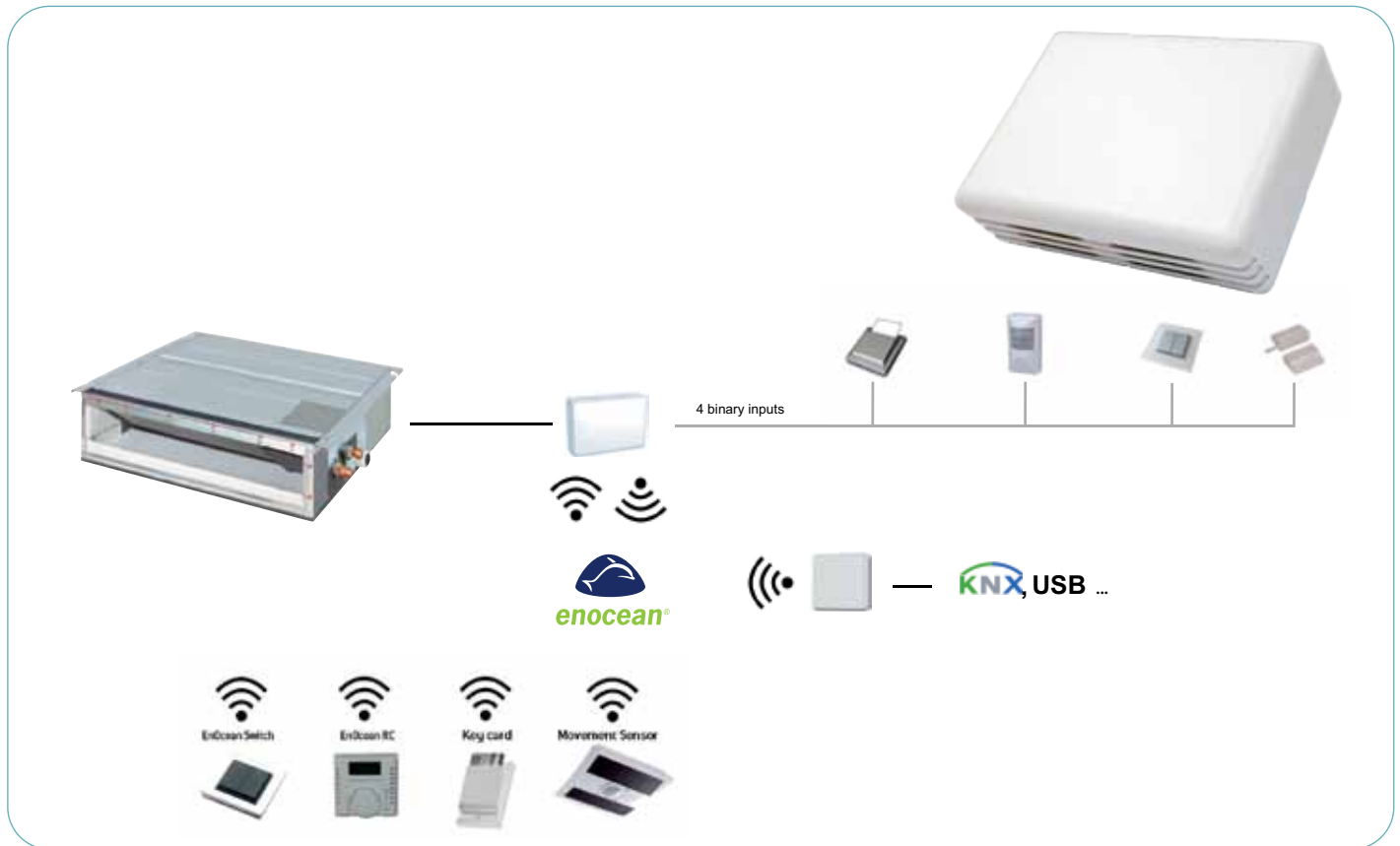
Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-AC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-AC-xxx-1_AC_Compatibility.pdf)

### Main features

- Easy installation. Direct connection to the AC indoor unit (S21 connector). Cable supplied.
- Great integration flexibility for all kind of EnOcean enabled sensors, actuators or gateways
- Configurable advanced room control functionalities using the IS-ENO-MANAGER software. Can work as repeater.
- Virtual temperature functionality. Useful when an external ambient temperature reference is required.
- Simultaneous control from EnOcean devices and the Air Conditioner IR handset.

## DK-RC-ENO-1i / DK-RC-ENO-1iC

IntesisBox® DK-RC-ENO-1i allows Monitoring and control, fully bi-directionally, of all the operational parameters of DAIKIN Sky & VRV Air Conditioners from EnOcean installations. 4 free-use binary inputs.



### Specifications

- Bidirectional: Monitoring and Control
- Configurable advanced room control functionalities
- Repeater functionality available
- 4 potential free binary inputs
- No external power supply required
- Small size (WxHxD): 70 x 100 x 28 mm

### Models available

- DK-RC-ENO-1i (EnOcean Freq: 868 MHz. Europe)
- DK-RC-ENO-1iC (EnOcean Freq: 315 MHz. USA and Asia)

\*\* For other world locations contact your supplier

### Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-ENO-1i\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-ENO-1i_datasheet_eng.pdf)

Compatibility list: [http://www.intesis.com/pdf/IntesisBox\\_DK-RC-xxx-1\\_AC\\_Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf)

### Main features

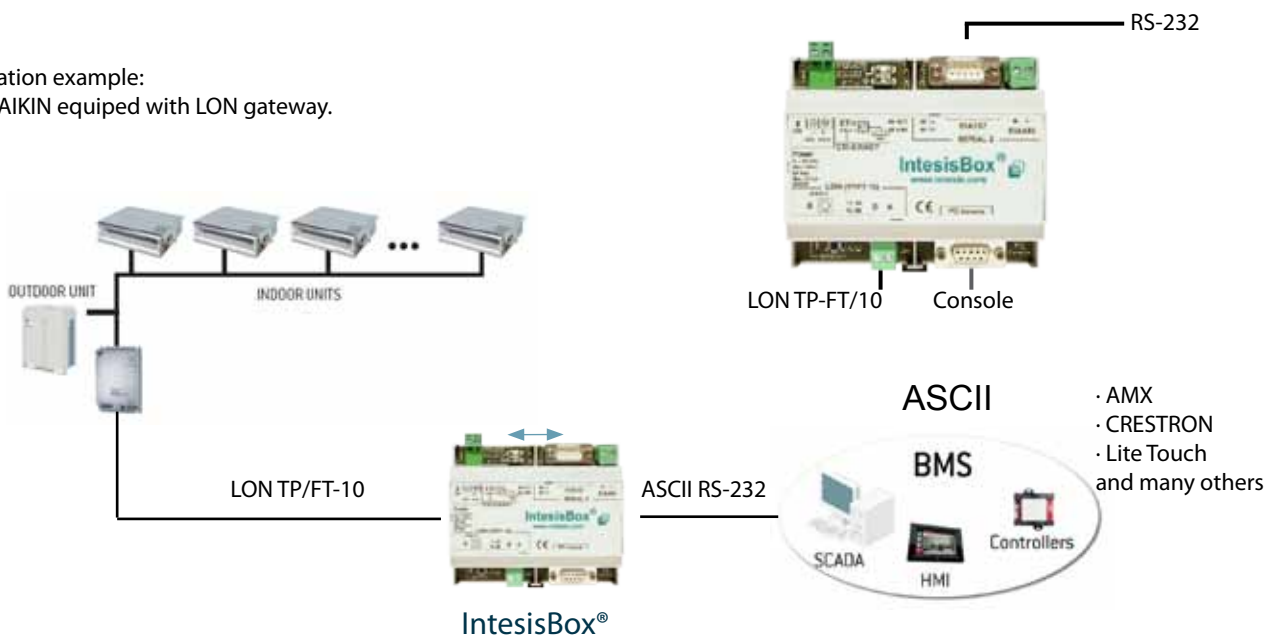
- Easy installation as Slave or Master in parallel with Daikin remote controllers.
- Great integration flexibility for all kind of EnOcean enabled sensors, actuators or gateways. 4 binary inputs working as standard EnOcean inputs or directly controlling the AC unit
- Configurable advanced room control functionalities using the IS-ENO-MANAGER software. Can work as repeater.
- Virtual temperature functionality. Useful when an external ambient temperature reference is required.



## IBOX-ASCII-LON

IntesisBox® IBOX-ASCII-LON gateway has been specially designed to allow monitoring and bidirectional control of LON systems using simple text (ASCII) messages.

Integration example:  
VRV DAIKIN equipped with LON gateway.



RS-232 serial port (male connector DB9, DTE).  
Transmission speed configurable from 1.200 to 57.600 bps.  
8 data bit, without parity, 1 stop bit.

### Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to LON
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

### Models available

- IBOX-ASCII-LON-A (Maximum 500 control points and 64 LON devices)
- IBOX-ASCII-LON-B (Maximum 4000 control points and 128 LON devices)

### Main features

- Easy installation. Direct connection using 2 cable (TP-FT/10) to

### Info

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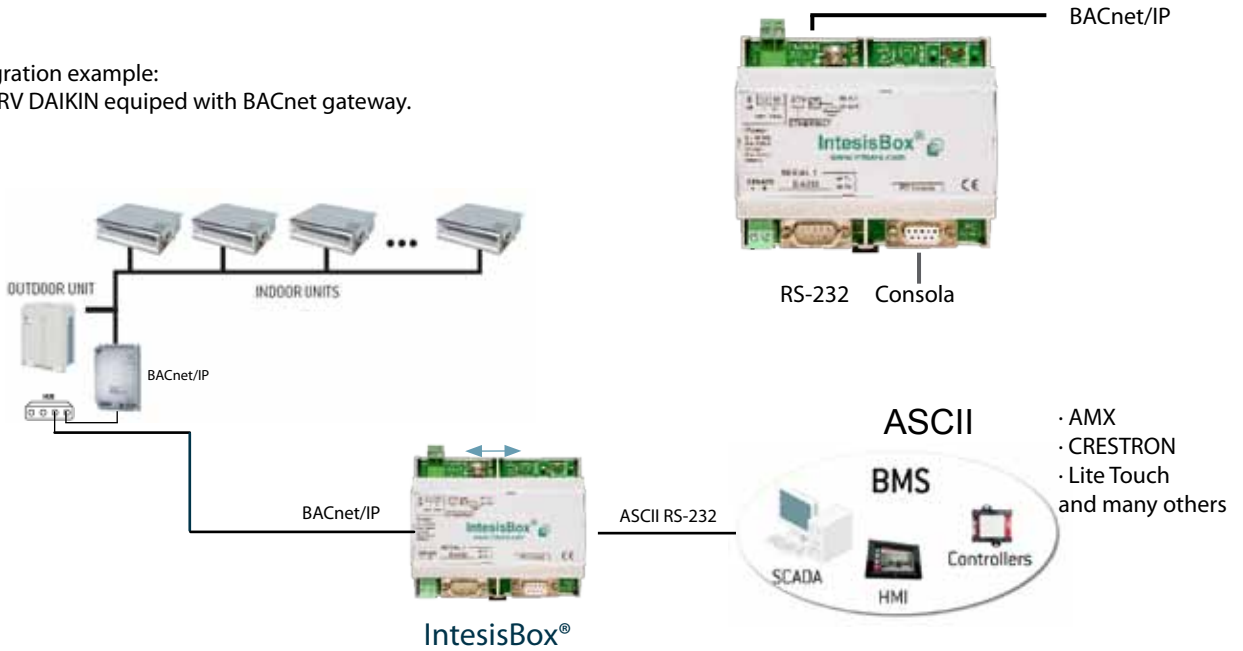
LON devices.

- Great integration flexibility. Thanks to LinkBoxASCII supplied software. No bindings needed thanks to continuous polling readout. Access trough physical address (Neuron-Id) or subnet node (commissioned devices) possible. LonMaker not required. Configuration using supplied LinkBoxASCII. RS-232 serial communication. LON variables can be read/write easily from the ASCII side, using simple text messages.
- Complete and transparent integration of LON installations (light control, blinds, ...) in programmable control systems using simple text messages through RS232 serial protocol (AMX, Crestron, Lite Touch,...).

# IBOX-ASCII-BAC

IntesisBox® IBOX-ASCII-BAC gateway have been specially designed to allow monitoring and bidirectional control of BACnet/IP systems using simple text (ASCII) messages.

Integration example:  
AC VRV DAIKIN equipped with BACnet gateway.



RS-232 serial port (male connector DB9, DTE).  
Baud rate selectable 1.200 to 57.600 bps.  
8 data bit, no parity, 1 stop bit.

## Specifications

- Bidirectional: Monitoring and Control
- Robust and reliable hardware
- Direct connection to BACnet/IP network
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules enclosure

## Models available

- IBOX-ASCII-BAC-A (Maximum 500 control points and 64 BACnet/IP devices)
- IBOX-ASCII-BAC-B (Maximum 4000 control points and 64 BACnet/IP devices)

## Info

Datasheet: [http://www.intesis.com/pdf/IntesisBox\\_ASCII\\_Server\\_Bacnet\\_IP\\_Client\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_ASCII_Server_Bacnet_IP_Client_datasheet_eng.pdf)

## Main features

- Easy installation.
- Great integration flexibility. The IntesisBox gateway can read other BACnet devices using continuous polling or subscription (COV). BACnet/IP objects can be read/write easily from the ASCII side, using simple text messages. Spontaneous messages can be sent to ASCII side when value changes are detected, avoiding to perform continuous polling. Configured by supplied software LinkBoxBAC.
- Advanced integration. Full transparent integration of BACnet devices in BMS systems based in ASCII like AMX, Crestron, Lite Touch, etc.



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