

# GENERAL CATALOGUE 2011

KNX - MODBUS - BACNET - LONWORKS - ENOCEAN - ASCII- OPC SERVER



## YOUR PARTNER FOR SYSTEMS INTEGRATION



Intesis Software is a company focused in solutions for systems integration for control, supervision and management of buildings. Our customers: manufacturers, control companies, integrators... They trust our products so to provide their equipment with the most advanced control and management features for the end user.

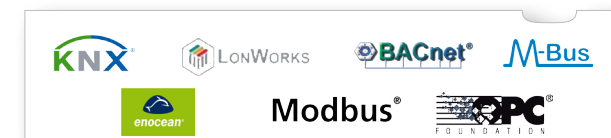
### Ten years of experience

Intesis Software S.L. was established in the year 2000. From the beginning it had the most important control companies in Spain among their clients.

After 10 years, Intesis distributes its products and solutions to more than 50 countries worldwide and has a constantly growing distribution network. Main multinational companies in technical equipment for buildings trust our devices. Our challenge is the continuous innovation and technical development of new products, in order to provide our customers with the best integration solution.

### IntesisBox® communication interfaces

The most advanced communication gateway solution for different system integration: KNX/EIB, LonWorks, ModBus, BACnet, EnOcean, M-Bus, ASCII, OPC and other proprietary protocols.



### OEM Products

We offer all our Know-how for the development of custom solutions for all kind of manufacturers of technical equipment for buildings. We can quickly enable your equipment with KNX/EIB, LonWorks, ModBus, BACnet, EnOcean, M-Bus, ASCII or OPCServer connectivity, reaching a reliable and quality product.

### TREND Interface Specialist

Innovative and growing range of gateways for Trend IQ2 and IQ3 control systems. More than 7 years offering quality services to Trend's network of integrators.

Integration in Trend of KNX/EIB, LonWorks, ModBus, BACnet, M-Bus, proprietary protocols... for multiple control and management applications.

### Software Development

We develop specific PC software, like lighting design related applications, energy Windows® and custom control and supervision PC-based solutions.

GENERAL CATALOGUE 2011 Edition 1

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Integration of fire and security control panels in your MODBUS installation








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Integration of any KNX device in your BACnet/IP installation
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Integration of one fire panel Notifier ID series in your BACnet/IP installation

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-  **ME-AC-LON-1**  
Integration of Mitsubishi Electric Air Conditioning units in your LON installation
-  **IBOX-LON-PANURBAN**  
Integration of Panasonic Air Conditioning units in your LON installation
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Integration of any KNX device in your LON installation





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Integration of Mitsubishi Electric Air Conditioning units in your EnOcean installation
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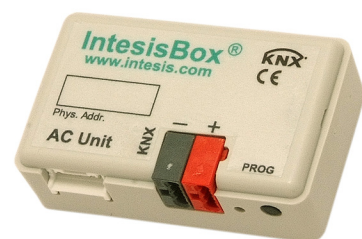
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-  **IS-OPC-NID3K**  
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-  **IS-OPC-IBOX-MBS**  
Convert the interface Modbus TCP of IntesisBox® IBOX-MBS-BAC to OPC Server



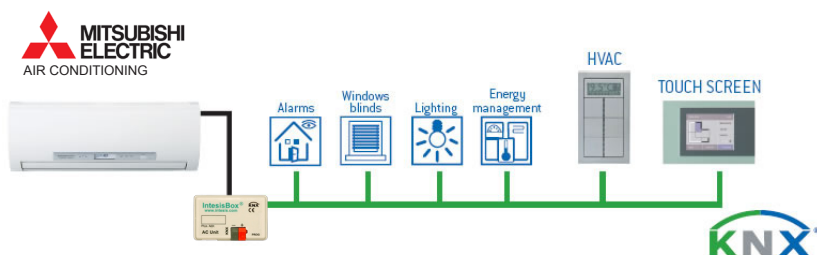
## ME-AC-KNX-1 v2

Integration of Mitsubishi Electric Air Conditioning units in your KNX installation



### IntesisBox®

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



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.ME-AC-xxx-1.AC.Compatibility.pdf>

## IntesisBox® ME-AC-KNX-1 v2 Gateway

IntesisBox® ME-AC-KNX-1 v2 gateway has been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air conditioners from KNX installations.

### EASY INSTALLATION

It can be installed inside the air conditioning indoor unit. The cable to connect the gateway to the connector CN105 or CN92 of the electronic board of the indoor unit is supplied.

### GREAT INTEGRATION FLEXIBILITY

It is configured directly from the ETS. The database has a complete set of communication objects that allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® ME-AC-KNX-1 includes communication objects that increase the functionality from KNX such as: Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller, ...

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from a KNX temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same KNX thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-KNX-1 v2 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the infrared Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.ME-AC-KNX-1.datasheet.eng.pdf>

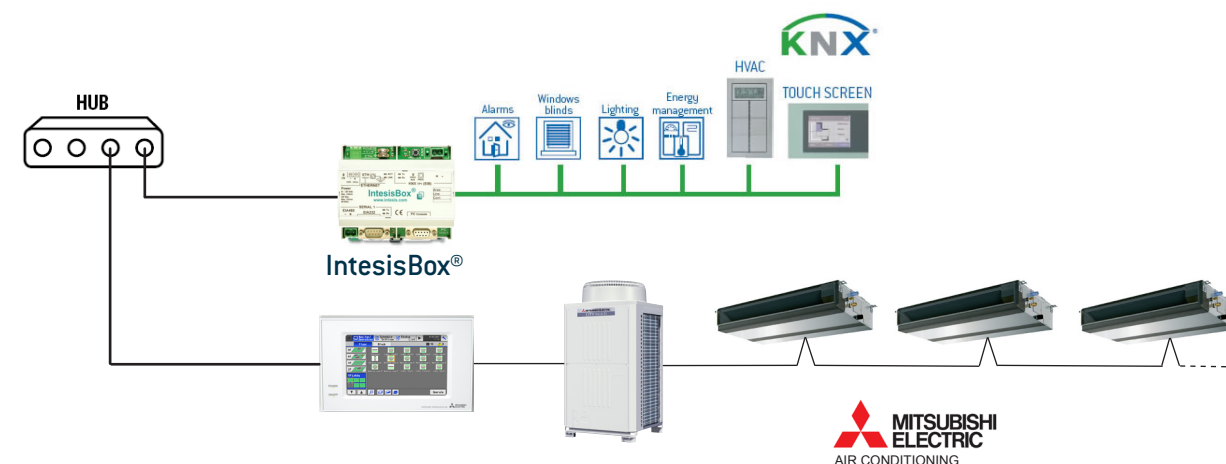
## ME-AC-KNX-15 ME-AC-KNX-100

Integration of Mitsubishi Electric Air Conditioning units, using G-50A, GB-50A or AG-150A, in your KNX installation

Compatible with all Mitsubishi Electric Air Conditioning units connected to centralized controls

### IntesisBox®

- Bidirectional: Supervision 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 envelope



\* The AG-150A must have the FGWEBASIC function (Web basic package). Ask Mitsubishi Electric.

## IntesisBox® ME-AC-KNX-15 / 100 Gateways

IntesisBox® ME-AC-KNX-15 / 100 gateways have been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air conditioners from KNX installations.

### EASY INSTALLATION

IntesisBox® ME-AC-KNX-15 / 100 need to be connected through Ethernet to the centralized controls G-50A / GB-50A / AG-150A / GB-50ADA.

Models available:

- ME-AC-KNX-15 (Maximum 15 group of indoor units and 1 G-50A / GB50A / AG-150A / GB-50ADA centralized control)
- ME-AC-KNX-100 (Maximum 100 group of indoor units and 2 G-50A / GB-50A / AG-150A / GB-50ADA centralized controls)

### GREAT INTEGRATION FLEXIBILITY

Using the software LinkBoxEIB, a complete set of communication objects can be accessed. These allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality. LinkBoxEIB is supplied free of charge with the purchase of IntesisBox®

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from a KNX temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same KNX thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-KNX-15 / 100 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the Air Conditioner remote controller.

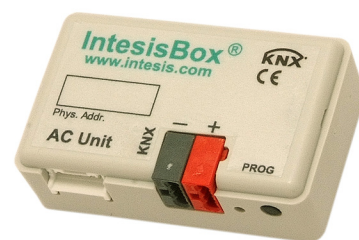
### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.KNX.ME.G50.datasheet.eng.pdf>



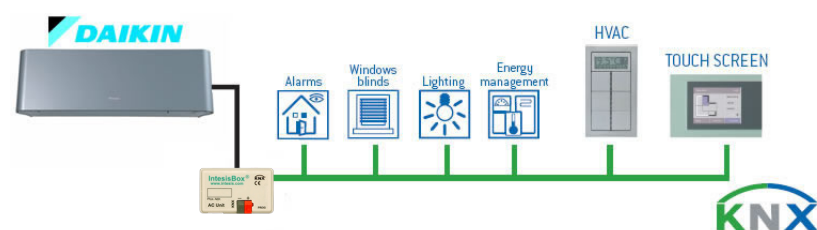
## DK-AC-KNX-1

Integration of Daikin domestic lines of Air Conditioning units in your KNX installation



### IntesisBox®

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



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox-DK-AC-xxx-1-AC.Compatibility.pdf>

## IntesisBox® DK-AC-KNX-1 Gateway

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

### EASY INSTALLATION

It can be installed inside the air conditioning indoor unit. The cable to connect the gateway to the connector S21 of the electronic board of the indoor unit is supplied.

### GREAT INTEGRATION FLEXIBILITY

It is configured directly from the ETS. The database has a complete set of communication objects that allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® DK-AC-KNX-1 includes communication objects that increase the functionality from KNX such as:  
Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller, ...

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from a KNX temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same KNX thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® DK-AC-KNX-1 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the infrared Air Conditioner remote controller.

### 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)

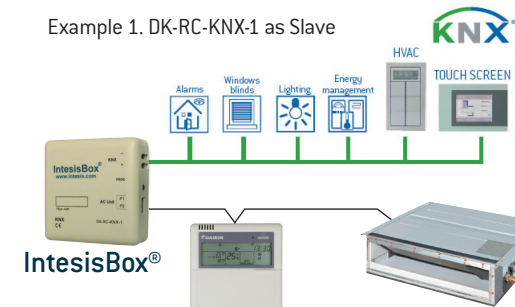
## DK-RC-KNX-1

Integration of Daikin SKY and VRV lines of Air Conditioning units in your KNX installation

### IntesisBox®

- Bidirectional: Supervision and Control
- Configuration from ETS
- Direct connection to KNX bus and to the AC indoor unit
- No external power supply required
- Small dimensions: 71 x 71 x 27 mm

Example 1. DK-RC-KNX-1 as Slave



Example 2. DK-RC-KNX-1 as Master



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox-DK-RC-xxx-1-AC.Compatibility.pdf>

## IntesisBox® DK-RC-KNX-1 Gateway

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

### EASY INSTALLATION

- Connect the gateway as **Slave** in parallel with the BRC1D52 / BRC1D51A / BRC2C51 remote controller (Wall controller act as master).
  - Connect the gateway as **Master** in parallel with the BRC4C61 / BRC4C62 remote controllers (Infrared receiver) as Slave.
  - Connect the gateway directly to the P1/P2 bus of the indoor unit as Master when there is no Daikin remote controller.
- Connection type: 2 wires without polarity. Total maximum distance: 500 meters.

### GREAT INTEGRATION FLEXIBILITY

It is configured directly from the ETS. The database has a complete set of communication objects that allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® DK-RC-KNX-1 includes communication objects that increase the functionality from KNX such as:  
Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller, ...

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from a KNX temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same KNX thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® DK-RC-KNX-1 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the infrared Air Conditioner remote controller.

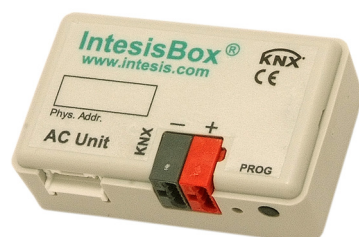
### DATASHEET

[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)

## PA-AC-KNX-1

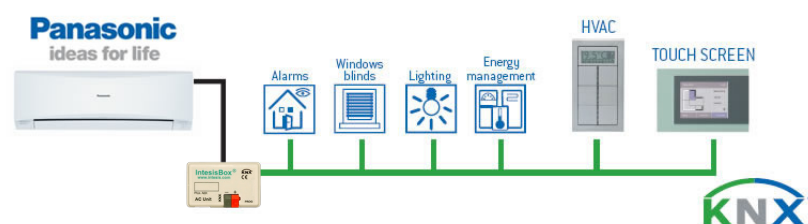
Integration of Panasonic domestic lines of Air Conditioning units in your KNX installation

Available in Q2 2011



### IntesisBox®

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



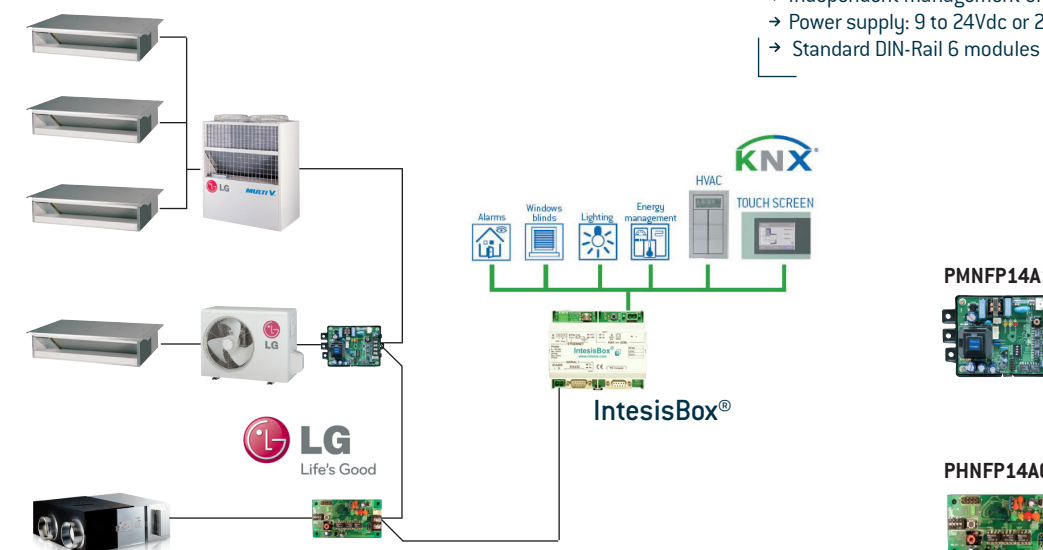
Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.PA-AC-xxx-1.AC.Compatibility.pdf>

## LG-AC-KNX-4 LG-AC-KNX-64 LG-AC-KNX-8 LG-AC-KNX-16

Integration of LG Air Conditioning units in your KNX installation

### IntesisBox®

- Bidirectional: Supervision 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 envelope



\* Accessories PHNFP14A1 / PHNFP14A0 are supplied by LG.  
Compatibility list available at: <http://www.intesis.com/pdf/IntesisBox.LG-AC-xxx-MIU.AC.Compatibility.pdf>

## IntesisBox® PA-AC-KNX-1 Gateway

The IntesisBox® PA-AC-KNX-1 gateway, allows supervision and bidirectional control of all the parameters and functionality of PANASONIC Air conditioners from KNX installations.

### EASY INSTALLATION

It can be installed inside the air conditioning indoor unit. The cable to connect the gateway to the connector CN-CNT of the electronic board of the indoor unit is supplied.

### GREAT INTEGRATION FLEXIBILITY

It is configured directly from the ETS. The database has a complete set of communication objects that allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® PA-AC-KNX-1 includes communication objects that increase the functionality from KNX such as:  
Open window, Working hours counter, Save /execute scenes, Enable/Disable device, Enable/disable remote controller, ...

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from a KNX temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same KNX thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® PA-AC-KNX-1 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the infrared Air Conditioner remote controller.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.PA-AC-KNX-1.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.PA-AC-KNX-1.datasheet_eng.pdf)

## IntesisBox® LG-AC-KNX-4 / 8 / 16 / 64 Gateways

IntesisBox® LG-AC-KNX-4 / 8 / 16 / 64 gateways have been specially designed, in collaboration with LG, to allow supervision and bidirectional control of all the parameters and functionality of LG Air conditioners from KNX installations.

### EASY INSTALLATION

IntesisBox® LG-AC-KNX-4 / 8 / 16 / 64 needs to be connected to all outdoor units (using the communication interface PMNFP14A1 when needed) and Heat recovering units (using the communication interface PHNFP14A0) through the RS485 Bus.

Models available:

- LG-AC-KNX-4 (Maximum 4 indoor units)
- LG-AC-KNX-8 (Maximum 8 indoor units)
- LG-AC-KNX-16 (Maximum 16 indoor units)
- LG-AC-KNX-64 (Maximum 64 indoor units)

### GREAT INTEGRATION FLEXIBILITY

Using the software LinkBoxEIB, a complete set of communication objects can be accessed. These allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality. LinkBoxEIB is supplied free of charge with the purchase of IntesisBox®

### ADVANCED INTEGRATION WITH AIR CONDITIONER

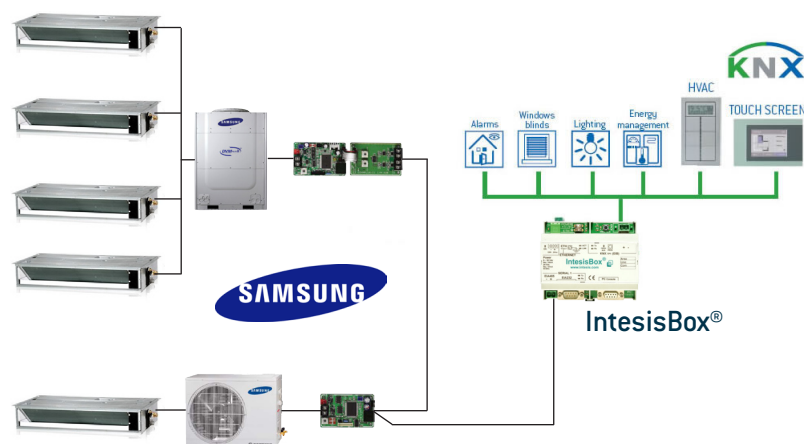
IntesisBox® LG-AC-KNX-4 / 8 / 16 / 64 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the Air Conditioner remote controller.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox.LG-AC-KNX-16-64.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.LG-AC-KNX-16-64.datasheet_eng.pdf)

## SM-AC-KNX-4 SM-AC-KNX-64 SM-AC-KNX-8 SM-AC-KNX-128 SM-AC-KNX-16

Integration of SAMSUNG Air Conditioning units in your KNX installation



### IntesisBox®

- Bidirectional: Supervision 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 envelope



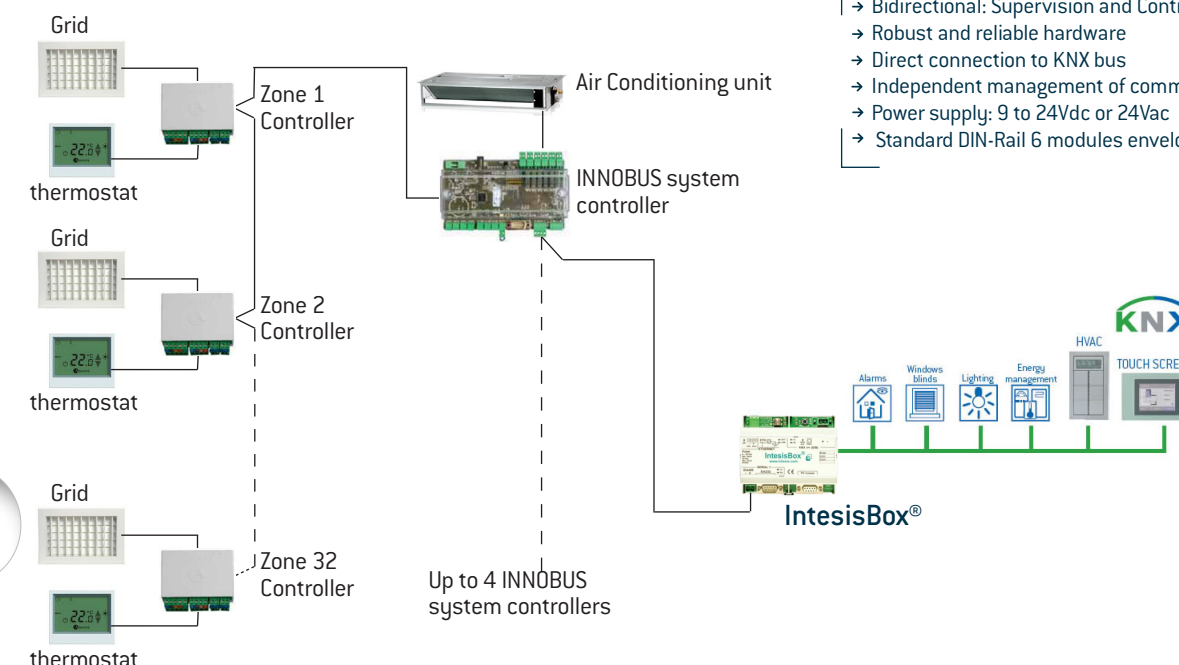
\* Accessories MIM-B13B or MIM-B04A are supplied by SAMSUNG.

Compatibility list available at: <http://www.intesis.com/pdf/IntesisBox.SM-AC-xxx-MIU.AC.Compatibility.pdf>

## IBOX-KNX-AIRZONE

Integration of AIRZONE zoning systems in your KNX installation

### Diagram



### IntesisBox®

- Bidirectional: Supervision 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 envelope

\* INNOBUS system is commercialized by AIRZONE.

Maximum 4 INNOBUS System Controllers each of them with a maximum of 32 Zone controllers

## IntesisBox® SM-AC-KNX-4 / 8 / 16 / 64 / 128 Gateways

IntesisBox® SM-AC-KNX-4 / 8 / 16 / 64 / 128 gateways have been specially designed, in collaboration with SAMSUNG, to allow supervision and bidirectional control of all the parameters and functionality of SAMSUNG Air conditioners from KNX installations.

### EASY INSTALLATION

Each external unit needs to be connected to a SAMSUNG communication interface, MIM-B13B or MIM-B04A as shown in the compatibility list. All the communication interfaces MIM-B13B or MIM-B04A need to be connected to IntesisBox® SM-AC-KNX-4 / 8 / 16 / 64 / 128 through the RS485 Bus.

Models available:

- SM-AC-KNX-4 [Maximum 4 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-KNX-8 [Maximum 8 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-KNX-16 [Maximum 16 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-KNX-64 [Maximum 64 indoor units and 16 MIM-B13B or MIM-B04A interfaces].
- SM-AC-KNX-128 [Maximum 128 indoor units and 16 MIM-B13B or MIM-B04A interfaces].

### GREAT INTEGRATION FLEXIBILITY

Using the software LinkBoxEIB, a complete set of communication objects can be accessed. These allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air conditioner functionality. LinkBoxEIB is supplied free of charge with the purchase of IntesisBox®

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® SM-AC-KNX-4 / 8 / 16 / 64 / 128 offers an advanced integration of Air conditioners in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.SM-AC-KNX-16-64-128.datasheet.eng.pdf>

## IntesisBox® IBOX-KNX-AIRZONE Gateway

IntesisBox® IBOX-KNX-AIRZONE gateway has been specially designed, in collaboration with AIRZONE, to allow supervision and bidirectional control of all the parameters and functionality of AIRZONE zonification systems from KNX installations.

### EASY INSTALLATION

IntesisBox® IBOX-KNX-AIRZONE needs to be connected to all the INNOBUS system controllers (Up to 4) through RS485 Bus.

### GREAT INTEGRATION FLEXIBILITY

Using the software LinkBoxEIB, a complete set of communication objects can be accessed. These allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the AIRZONE zonification system (INNOBUS). LinkBoxEIB is supplied free of charge with the purchase of IntesisBox®

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® IBOX-KNX-AIRZONE offers an advanced integration of zonification systems in your KNX projects, a complete bidirectional communication and simultaneous control from KNX and the Airzone thermostats.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.KNX.Airzone.datasheet.eng.pdf>

### AIRZONE INNOBUS SYSTEM

Airzone InnoBUS SYSTEM is an integral Climate Control system by zones that manages both air conditioning systems as well as heating systems. It controls equipment such as air heat pump or also chillers and fancoils, so it can work in cold mode or in heat mode; also systems of heat radiation can be controlled, as for example radiation floors or wall heaters.



## IBOX-KNX-LON

Integration of any LON device in your KNX installation

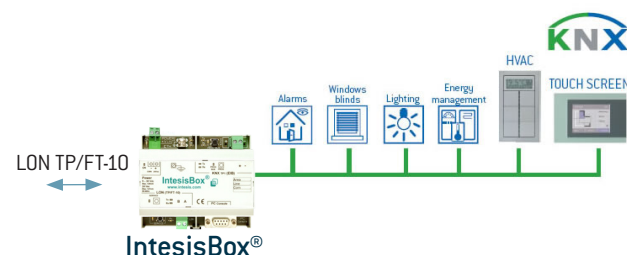
### LonWorks® Devices

**HVAC**  
 · Air conditioners  
 · Coolers  
 · thermostats  
 · Fan-coil Controllers

**Meters**  
 · Electric meters  
 · Energy meters  
 · T° and Hr Probes

**Automation**  
 · B.M.S.  
 · PLC  
 · HMI

and many others



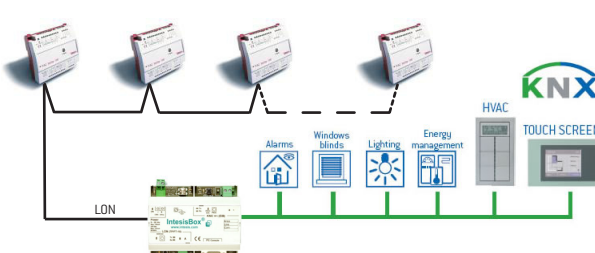
### IntesisBox®

- Bidirectional: Supervision 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 envelope

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



Integration example:  
 LON Fan-coil controllers.



## IntesisBox® IBOX-KNX-LON Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-KNX-LON gateway needs to be connected to LonWorks® devices through the TP/FT-10 [2 wire] connection.

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)

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® LON interface reads continuously by polling the configured LON devices, and for this reason no bindings between them and the IntesisBox® are needed. All the read values are kept in the IntesisBox® memory to be used in the KNX system when needed. IntesisBox® can access the LON devices either using Neuron-Id [physical address] or subnet/node [commissioned devices]. There is no need of commissioning the LON devices for this integration, thus no need of any LON expertise or commissioning tool, such as LonMaker, is required. All can be done from LinkBoxEIB.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-KNX-LON offers an advanced integration of centralized Air Conditioning systems equipped with LonWorks® interface in KNX installations, such as Daikin, Mitsubishi Heavy, Sanyo, General, Fujitsu, LG, etc.

It offers as well integration of meters, PLCs, coolers and in general of any system with LonWorks® connectivity.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.KNX.LON.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.KNX.LON.datasheet_eng.pdf)

## IBOX-KNX-MBRTU IBOX-KNX-MBTCP

Integration of any ModBus device in your KNX installation

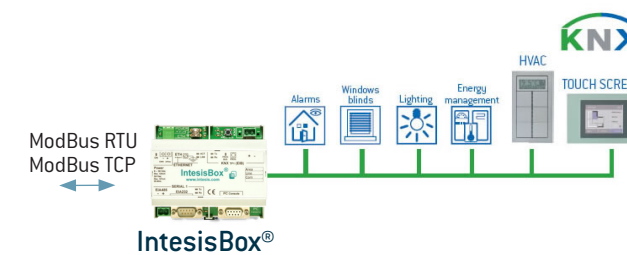
### ModBus Devices

**HVAC**  
 · Air conditioners  
 · Coolers  
 · thermostats  
 · Fan-coil Controllers

**Meters**  
 · Electric meters  
 · Energy meters  
 · T° and Hr Probes

**Automation**  
 · B.M.S.  
 · PLC  
 · HMI

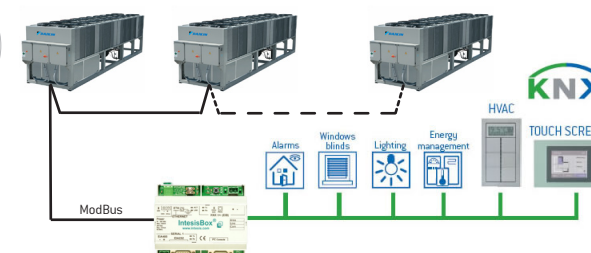
and many others



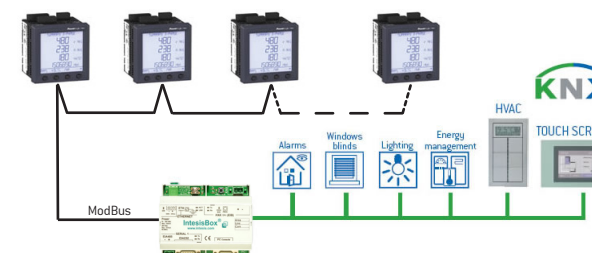
### IntesisBox®

- Bidirectional: Supervision 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 envelope

Integration example:  
 ModBus RTU chillers



Integration example:  
 ModBus RTU electrical meters.



## IntesisBox® IBOX-KNX-MBRTU / MBTCP Gateways

IntesisBox® IBOX-KNX-MBRTU / MBTCP gateways have been specially designed to allow supervision and bidirectional control of all the parameters and functionality of systems and equipment with Modbus connectivity from KNX installations.

### EASY INSTALLATION

The IntesisBox® IBOX-KNX-MBRTU gateway can connect to ModBus devices through the RS485 [2 wire] connection or through RS232. The IntesisBox® IBOX-KNX-MBTCP gateway connects to ModBus TCP devices through Ethernet.

Models available:

- IBOX-KNX-MBRTU-100 (Maximum 100 control points and 254 ModBus RTU slave devices)
- IBOX-KNX-MBRTU-A / B (Maximum 500 / 3000 control points and 254 ModBus RTU slave devices)
- IBOX-KNX-MBTCP-100 (Maximum 100 control points and 5 ModBus TCP slave devices)
- IBOX-KNX-MBTCP-A / B (Maximum 500 / 3000 control points and 5 ModBus TCP slave devices)

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® ModBus Master interface reads continuously by polling the configured Modbus slave devices. All the read values are kept in the IntesisBox® memory to be used in the KNX system when needed. When a change is detected in any ModBus register, a write telegram with the new value can be sent to associated KNX group address.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-KNX-MBRTU / MBTCP offers an advanced integration of Air Conditioning systems with Modbus interface in KNX installations, such as Clatesa, Hitecsa, Lennox, Carrier, etc.

It offers as well integration of meters, PLCs, coolers and in general of any system with Modbus connectivity.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.KNX.Modbus.RTU.master.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.KNX.Modbus.RTU.master.datasheet_eng.pdf)

[http://www.intesis.com/pdf/IntesisBox.KNX.Modbus.TCP.master.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.KNX.Modbus.TCP.master.datasheet_eng.pdf)

## IBOX-KNX-BAC

Integration of any BACnet/IP device in your KNX installation

### BACnet devices

**HVAC**  
· Air conditioners  
· Coolers  
· Thermostats  
· Fan-coil Controllers

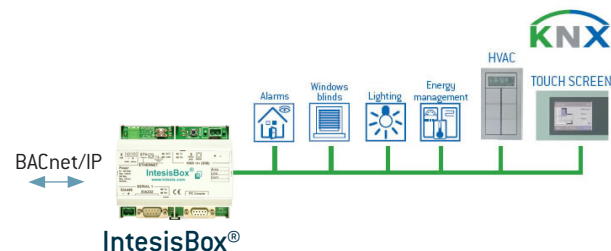
### Meters

· Electric meters  
· Energy meters  
· T° and H° Probes

### Automation

· B.M.S.  
· PLC  
· HMI

and many others

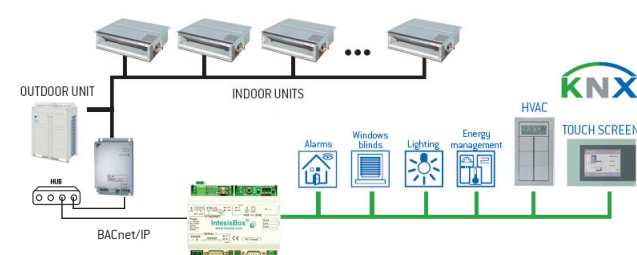


### IntesisBox®

- Bidirectional: Supervision 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 envelope

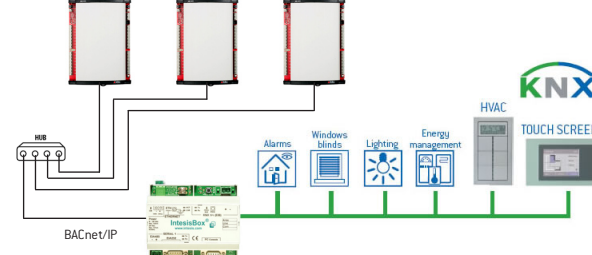
Integration example:

VRV DAIKIN Air conditioners equipped with BACnet gateway.



Integration example:

BACnet/IP Controllers.



## IntesisBox® IBOX-KNX-BAC Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-KNX-BAC gateway needs to be connected to the BACnet/IP network where the BACnet devices to integrate are connected.

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)

\* Compatible with Bacnet ASHRAE 135 – 2001 Annex J - BACnet/IP protocol.

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-KNX-BAC is a BACnet/IP client that reads/writes points of other BACnet/IP devices connected to the BACnet network. All the read values are kept in the IntesisBox® memory to be used in the KNX system when needed. When a change is detected in any BACnet object a write telegram with the new value is sent to associated KNX group address. The IntesisBox® BACnet interface allows reading other BACnet objects by continuous polling or using subscription (COV).

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-KNX-BAC offers an advanced integration of Air Conditioning systems with BACnet/IP interface in KNX installations, such as Daikin, Mitsubishi Heavy, LG, etc.

It offers as well integration of meters, PLCs, HMI and of any system with BACnet/IP connectivity.

### 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)

## IBOX-KNX-ENO-A1 IBOX-KNX-ENO-A1C

Available in Q2 2011

Integration of any EnOcean device in your KNX installation

### EnOcean Devices

**Switches**  
· Wireless Switches  
· Key card readers  
· Window contacts  
· Industrial switches

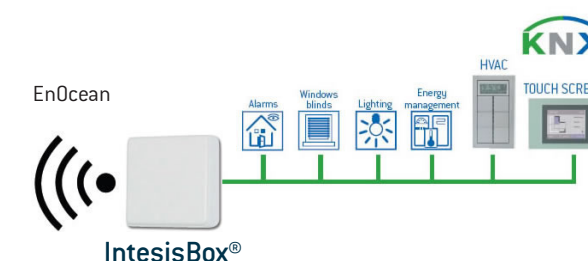
### Sensors

· Temperature Sensors  
· Humidity Sensors  
· Movement Sensors  
· Luminance Sensors

### Automation

· Air Conditioners  
· Actuators  
· Room controllers

and many others



Integration example:

Conventional EnOcean devices, Mitsubishi Electric and DAIKIN Air Conditioner using the EnOcean gateway.



### IntesisBox®

- Bidirectional: Supervision and Control
- Configuration from ETS
- Direct connection to KNX bus
- No external power supply required
- Small dimensions: 71 x 71 x 27 mm

EnOcean technology  
**No wires. No batteries. No limits.**

- Interoperable wireless standard
- Self-powered
- Proven technology for sustainable buildings

## IntesisBox® IBOX-KNX-ENO-A1 /A1C Gateways

IntesisBox® IBOX-KNX-ENO-A1 / A1C gateways have been specially designed to allow supervision and bidirectional control of all the parameters and functionality of EnOcean devices from KNX installations.

### EASY INSTALLATION

IntesisBox® IBOX-KNX-ENO-A1 / A1C gateways need to be connected to KNX bus and installed in an appropriate place to allow a good range of the EnOcean radio signal.

Models Available:

- IBOX-KNX-ENO-A1 (EnOcean Freq: 868 MHz. Europe)
- IBOX-KNX-ENO-A1C (EnOcean Freq: 315 MHz. USA and Asia)

\*\* For other world locations contact your supplier.

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-KNX-ENO-A1 is an EnOcean device that send/receives telegrams from/to other EnOcean devices in its signal range. When a change is detected a write telegram is sent to KNX with the new value to the KNX group address linked, and vice versa.

The EnOcean interface of IntesisBox® supports various configuration profiles, allowing an easy configuration of the devices.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-KNX-ENO-A1 offers an advanced integration of Air Conditioner systems with EnOcean interface in KNX installations, such as Daikin and Mitsubishi Electric

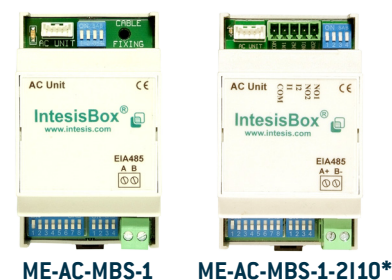
It offers as well integration of switches, Key card readers, thermostats, room controllers and in general of any EnOcean device.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox.KNX.ENO.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.KNX.ENO.datasheet_eng.pdf)

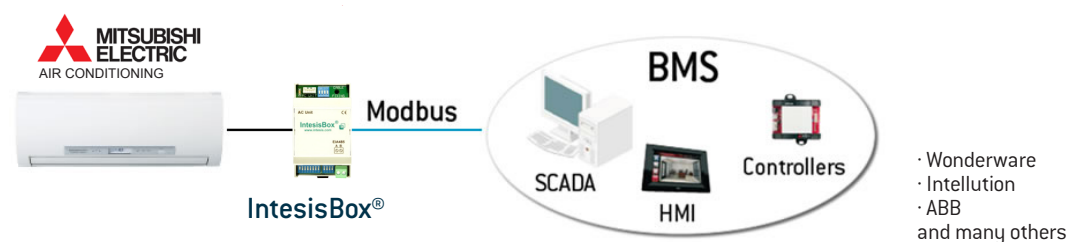
## ME-AC-MBS-1 ME-AC-MBS1-2I10

Integration of Mitsubishi Electric Air Conditioning units in your MODBUS installation



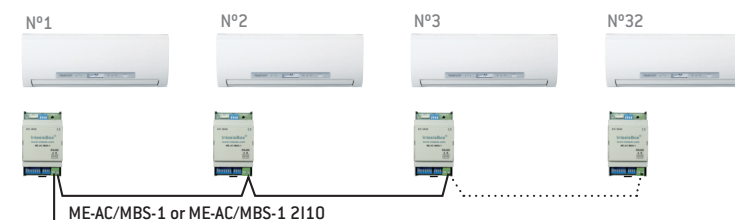
### IntesisBox®

- Bidirectional: Supervision and Control
- Fast and easy installation
- \*It has 2 digital inputs and 1 digital output
- Direct connection to RS-485 bus and the AC indoor unit
- No external power supply required
- Small dimensions: 93 x 53 x 58 mm



## ME-AC-SMS-32

Control of Mitsubishi Electric Conditioning units through SMS text messages



### IntesisBox®

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Requires ME-AC-MBS-1 or ME-AC-MBS-1-2I10
- Simple user interface via SMS
- Independent communications management



SMS



Example: #D1M1T22A1  
Unit 1 ON  
Heat mode  
Temperature 22°C

## IntesisBox® ME-AC-MBS-1 and ME-AC-MBS1-2I10 Gateways

IntesisBox® ME-AC-MBS-1 and ME-AC-MBS-2I10 gateways have been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air conditioners from Modbus installations.

### EASY INSTALLATION

The cable to connect the gateway to the connector CN105 or CN92 of the electronic board of the indoor unit is supplied.

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of a complete set of Modbus registers that allow from a quick and easy integration, with the basic parameters, to a complete monitoring and control of the entire operation of the air conditioning unit.

The IntesisBox® ME-AC-MBS-1-2I10 gateway also features 2 digital inputs and 1 digital output mapped in 3 independent Modbus registers.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® ME-AC-MBS-1 and ME-AC-MBS-1-2I10 include objects designed to increase communication functionality from Modbus such as: Open window, Working hours counter, Enable/Disable device, Enable/disable remote controller, ...

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-MBS-1 offers an advanced integration of Air Conditioners in your Modbus projects, a complete bidirectional communication and simultaneous control from Modbus and the infrared Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.ME-AC-MBS-1.datasheet.eng.pdf>

<http://www.intesis.com/pdf/IntesisBox.ME-AC-MBS-1-2I10.datasheet.eng.pdf>

## IntesisBox® ME-AC-SMS-32 Gateway

IntesisBox® ME-AC-SMS-32 gateway has been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air conditioners, using simple text messages (SMS) from any mobile phone.

### EASY INSTALLATION

IntesisBox® ME-AC-SMS-32 must be connected using a RS-485 bus to the ME-AC-MBS-1 or ME-AC-MBS-1-2I10 gateways.

- ME-AC-SMS-32 [Maximum of 32 indoor units. Requires a ME-AC-MBS-1 or ME-AC-MBS-1-2I10 for each indoor unit]

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of the general parameters and alarms of the AC indoor units continuously, sending an SMS instantly to one or multiple recipients in case of detection of an alarm.

**Supervision:** {On/Off, Setpoint temperature, Return Temperature, Operation Mode, Fan Speed, Vane position, Working hours counter and Fault}

**Control:** {On/Off, Setpoint Temperature, Operation Mode}

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-SMS-32 provides security against unwanted interventions: allows to configure access control only for a predefined phone number list. Fully configurable alarm notifications: allows to select phone number alarm receivers, and also the notification or not of restore alarm, and a maximum number of alarms to send per day. Flexible and powerful auto control of the AC units based on calendar. Language selection for the SMS messages.

### DATASHEET

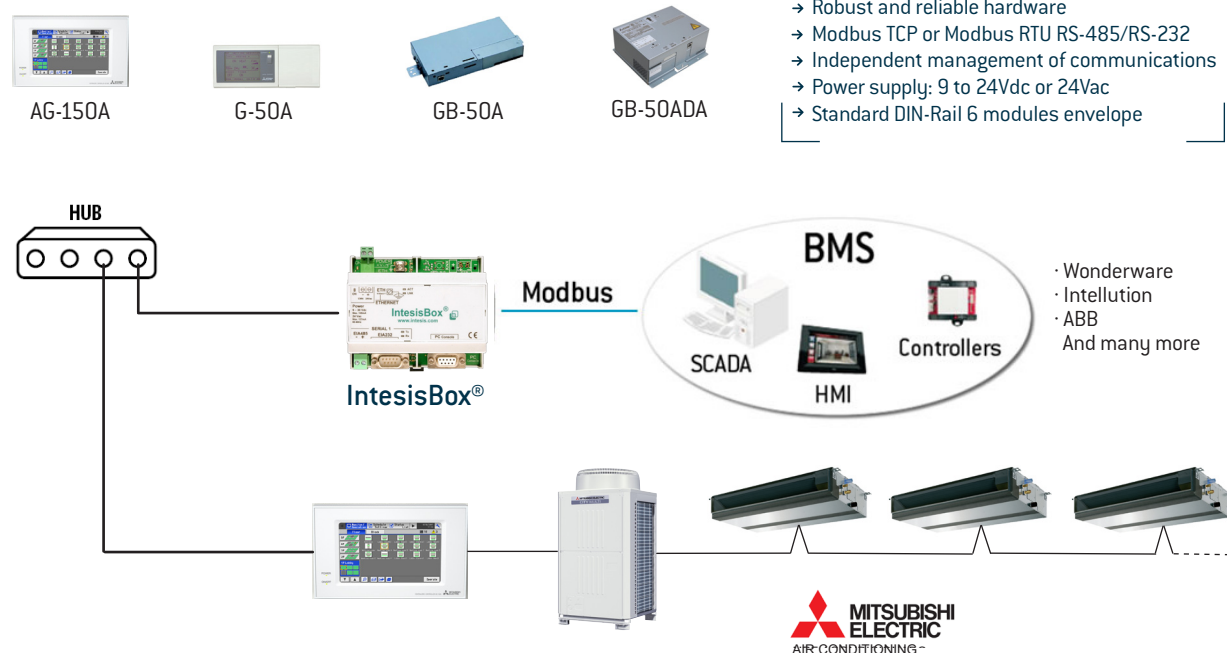
<http://www.intesis.com/pdf/IntesisBox.ME.AC.SMS.32.datasheet.eng.pdf>



## ME-AC-MBS-50 ME-AC-MBS-100

Integration of Mitsubishi Electric Air Conditioning units, using G-50A, GB-50A, AG-150A or GB-50ADA in your MODBUS installation

Compatible with all Mitsubishi Electric Air Conditioning units connected to centralized controls



\* The AG-150A must have the FGWEBASIC function (Web basic package). Ask Mitsubishi Electric.

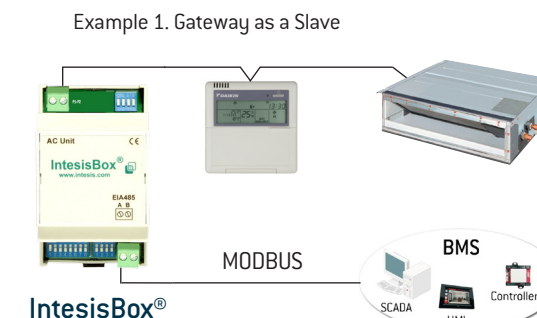
### IntesisBox®

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Modbus TCP or Modbus RTU RS-485/RS-232
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

· Wonderware  
· Intellution  
· ABB  
· And many more

## DK-RC-MBS-1

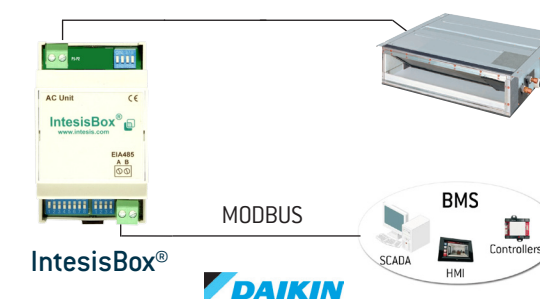
Integration of DAIKIN Air Conditioning units from the lines SKY and VRV in your Modbus installation



### IntesisBox®

- Bidirectional: Supervision and Control
- Fast and easy installation
- Direct connection to RS-485 bus and the AC indoor unit
- No external power supply required
- Small dimensions: 93 x 53 x 58 mm

Example 2. Gateway as a Master



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.DK-RC-xxx-1.AC.Compatibility.pdf>

## IntesisBox® ME-AC-MBS-50 / 100 Gateways

IntesisBox® ME-AC-MBS-50 / 100 gateways have been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air Conditioners from Modbus installations.

### EASY INSTALLATION

IntesisBox® ME-AC-MBS-50 / 100 need to be connected through Ethernet to the G-50A / GB-50A / AG-150A / GB-50ADA centralized controls.

- ME-AC-MBS-50 (Maximum 50 group of indoor units and 1 G-50A / GB-50A / AG-150A / GB-50ADA centralized control)
- ME-AC-MBS-100 (Maximum 100 group of indoor units and 2 G-50A / GB-50A / AG-150A / GB-50ADA centralized control)

### GREAT INTEGRATION FLEXIBILITY

Using the software LinkBoxMB, a complete set of Modbus registers can be accessed. Those allow both an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air Conditioner functionality. LinkBoxMB is supplied free of charge with the purchase of IntesisBox®, and it works under Windows® OS.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-MBS-50 / 100 offers an advanced integration of Air Conditioners in your Modbus projects, a complete bidirectional communication and simultaneous control from Modbus and the Air Conditioner remote controller.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.ME.G50.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.ME.G50.datasheet_eng.pdf)

## IntesisBox® DK-RC-MBS-1 Gateway

IntesisBox® DK-RC-MBS-1 gateway allows supervision and bidirectional control of all the parameters and functionality of DAIKIN Air Conditioners from Modbus installations.

### EASY INSTALLATION

- Connect the gateway as **Slave** in parallel with the BRC1D52 / BRC1D51A / BRC2C51 remote controllers (Wall controller acts as master).
  - Connect the gateway as **Master** in parallel with the BRC4C61 / BRC4C62 remote controller (Infrared receiver) as Slave.
  - Connect the gateway directly to the P1/P2 bus of the indoor unit as Master when there is no Daikin remote controller.
- Connection type: 2 wires without polarity. Total maximum distance: 500 meters.

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of a complete set of Modbus registers allowing an easy and fast integration with the basic parameters, and a complete supervision and control for all the AC unit functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® DK-RC-MBS-1 includes communication objects that increase the functionality from MBS such as:  
Open window, Working hours counter, Enable/Disable device, Enable/disable remote controller, ...

### ADVANCED INTEGRATION WITH AIR CONDITIONER

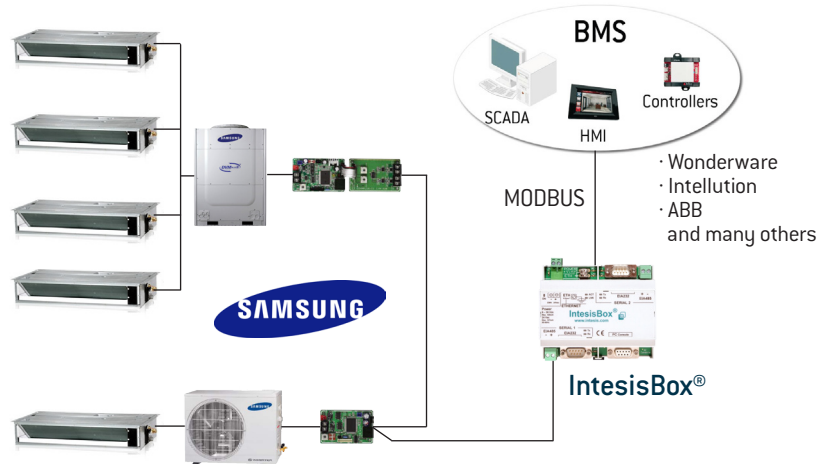
IntesisBox® DK-RC-MBS-1 offers an advanced integration of Air Conditioners in your MBS projects, a complete bidirectional communication and simultaneous control from MBS and the infrared Air Conditioner remote controller.

### 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)

## SM-AC-MBS-4 SM-AC-MBS-64 SM-AC-MBS-8 SM-AC-MBS-128 SM-AC-MBS-32

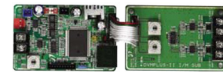
Integration of SAMSUNG Air Conditioning units in your Modbus installation



### IntesisBox®

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Modbus TCP or Modbus RTU RS-485/RS-232
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

MIM-B13B\*



MIM-B04A\*



\* Accessories MIM-B13B OR MIM-B04A are supplied by SAMSUNG.

Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.SM-AC-xxx-MIU.AC.Compatibility.pdf>

## FJ-RC-MBS-1

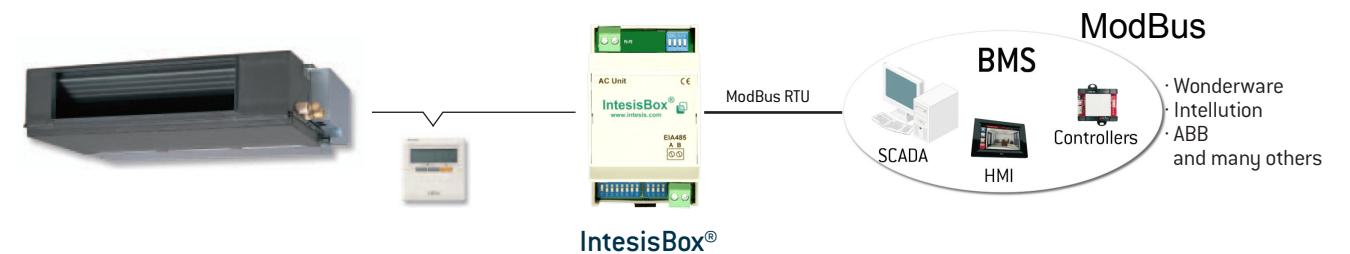
Integration of FUJITSU Air Conditioning units in your Modbus installation

\* Preliminary information

Available in Q2 2011

### IntesisBox®

- Bidirectional: Supervision and Control
- Fast and easy installation
- Direct connection to RS-485 bus and the indoor unit
- No external power supply required
- Small dimensions: 93 x 53 x 58 mm



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.FJ-RC-xxx-1.AC.Compatibility.pdf>

## IntesisBox® SM-AC-MBS-4 / 8 / 32 / 64 / 128 Gateways

IntesisBox® SM-AC-KNX-4 / 8 / 32 / 64 / 128 gateways have been specially designed, in collaboration with SAMSUNG, to allow supervision and bidirectional control of all the parameters and functionality of SAMSUNG Air Conditioners from Modbus installations.

### EASY INSTALLATION

Each external unit needs to be connected to a SAMSUNG communication interface, MIM-B13B or MIM-B04A as shown in the compatibility list. All the communication interfaces MIM-B13B or MIM-B04A need to be connected to IntesisBox® SM-AC-MBS-4 / 8 / 32 / 64 / 128 through the RS485 Bus.

Models available:

- SM-AC-MBS-4 [Maximum 4 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-MBS-8 [Maximum 8 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-MBS-32 [Maximum 32 indoor units and 16 MIM-B13B or MIM-B04A interfaces]
- SM-AC-MBS-64 [Maximum 64 indoor units and 16 MIM-B13B or MIM-B04A interfaces].
- SM-AC-MBS-128 [Maximum 128 indoor units and 16 MIM-B13B or MIM-B04A interfaces].

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of a complete set of Modbus registers can be accessed. These allow an easy and fast integration, using the basic parameters, to a complete supervision and control of the whole Air Conditioner functionality. LinkBoxMB configuration software is supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® SM-AC-MBS-4 / 8 / 32 / 64 / 128 offers an advanced integration of Air conditioners in your Modbus projects, a complete bidirectional communication and simultaneous control from Modbus and the Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.SM-AC-MBS-32-64-128.datasheet.eng.pdf>

## IntesisBox® FJ-RC-MBS-1 Gateway

IntesisBox® FJ-RC-MBS-1 allows supervision and bidirectional control of all the functionality parameters of Fujitsu Air Conditioning units from any Modbus installation.

### EASY INSTALLATION

- Connect the gateway in parallel with the Fujitsu wired remote controller unit.

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of a complete set of Modbus registers allowing an easy and fast integration with the basic parameters, and a complete supervision and control for all the AC unit functionality.

### SPECIFIC IntesisBox® OBJECTS

IntesisBox® FJ-RC-MBS-1 includes Modbus registers that increase the functionality from Modbus such as: Open window, Working hours counter, Enable/Disable device, Enable/disable remote controller, ...

### ADVANCED INTEGRATION WITH AIR CONDITIONER

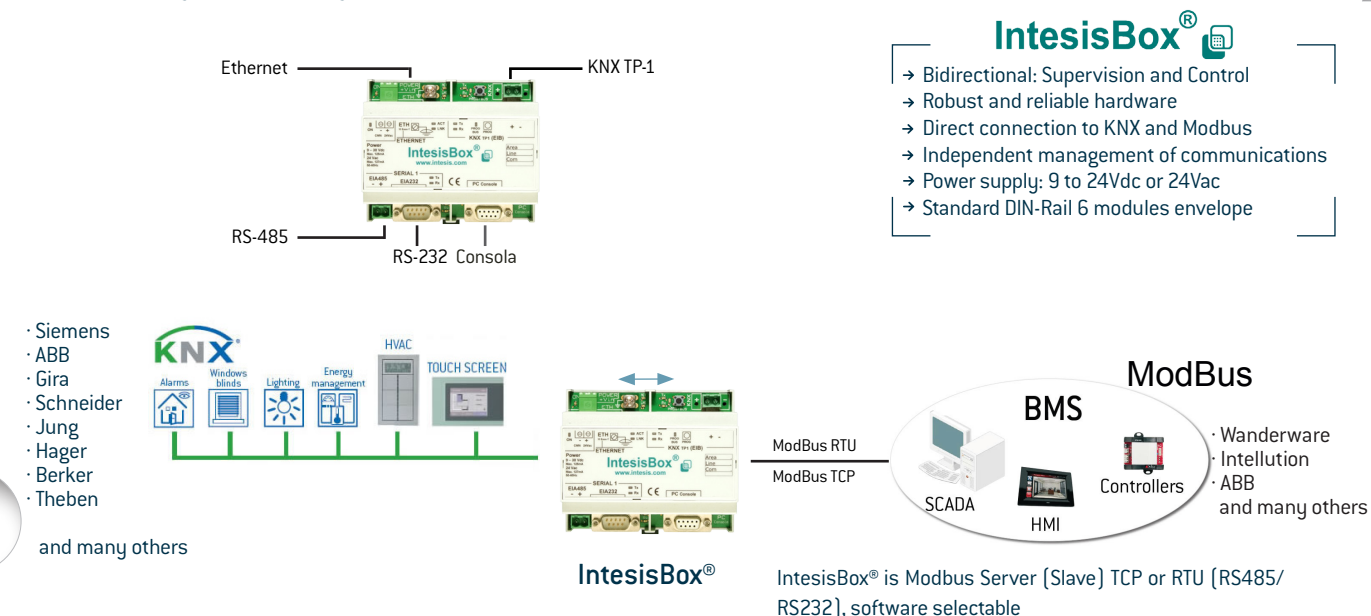
IntesisBox® FJ-RC-MBS-1 offers an advanced integration of Air conditioners in your Modbus projects, a complete bidirectional communication and simultaneous control from Modbus and the infrared Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.FJ-RC-MBS-1.datasheet.eng.pdf>

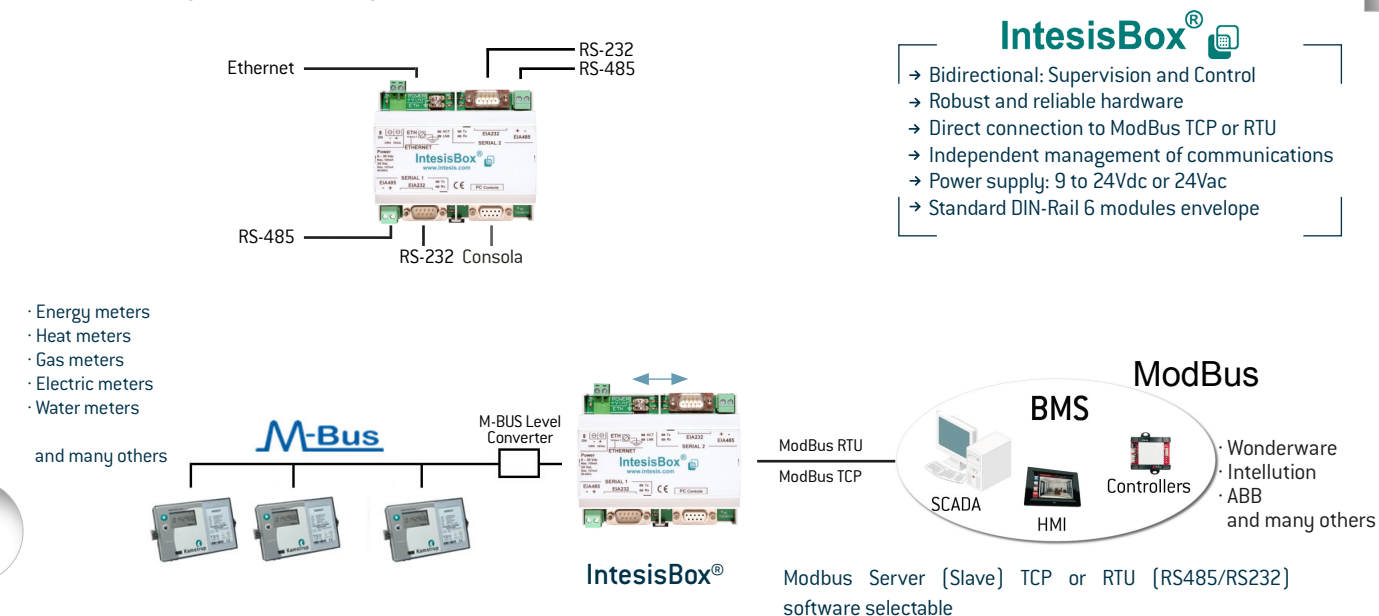
## IBOX-MBS-KNX

Integration of any KNX device in your Modbus B.M.S.



## IBOX-MBS-MBUS

Integration of any M-BUS device in your Modbus installation



## IntesisBox® IBOX-MBS-KNX Gateway

IntesisBox® IBOX-MBS-KNX gateway has been specially designed to allow supervision and bidirectional control of all the parameters and functionality of KNX systems from ModBus installations.

### EASY INSTALLATION

The IntesisBox® IBOX-MBS-KNX gateway connects directly to KNX twisted pair bus (TP-1)

Models available:

- IBOX-MBS-KNX-100 [Maximum 100 control points]
- IBOX-MBS-KNX-A [Maximum 500 control points]
- IBOX-MBS-KNX-B [Maximum 3000 control points]

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® IBOX-MBS-KNX gateway behaves as another device in the KNX system, keeping in memory and updated mirror of the values of KNX points configured, ready to serve it to the ModBus system when required. The KNX points can be read and written from a ModBus master device. The ModBus interface supports ModBus TCP or ModBus RTU (RS-232 or RS-485), software selectable, and behaves as a ModBus slave device. The KNX TP-1 (EIB) interface is connected directly to the KNX bus and it is optoisolated from the other electronic components. The IntesisBox® ModBus Server is configured with LinkBoxMB, a Windows® compatible software supplied for free with the purchase of IntesisBox®. With the installation of LinkBoxMB, a demo project for this integration is installed, allowing an easy and fast configuration of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-KNX offers a complete and transparent integration of KNX installations (light control, blinds, ...) in building management systems based in ModBus (Wonderware, Intellution, ABB, Schneneider,...).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox\\_Modbus\\_Server\\_KNX\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_Modbus_Server_KNX_datasheet_eng.pdf)

## IntesisBox® IBOX-MBS-MBUS Gateway

IntesisBox® IBOX-MBS-MBUS gateway has been specially designed to monitor all the registers of M-BUS meters from Modbus installations.

### EASY INSTALLATION

IntesisBox® IBOX-MBS-MBUS gateway connects to M-Bus system using an external level converter M-Bus RS232 or RS485 at one side, and at the other side it communicates with the supervision/control system with Modbus RTU or TCP protocol.

- IBOX-MBS-MBUS-100 [Maximum 100 control points and 10 devices]
- IBOX-MBS-MBUS-A [Maximum 600 control points and 60 devices]
- IBOX-MBS-MBUS-B [Maximum 2000 control points and 500 devices]

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® polls continuously, or only when ordered from the Modbus master, the M-Bus devices to obtain updated readings. With each reading, the new value received is updated in the memory of IntesisBox® and is available to be read by the Modbus master device. The polling of a particular M-Bus device, or all M-Bus devices simultaneously, can be forced at any time from the Modbus side, writing a 1 in the corresponding digital signal prepared especially for this purpose in the IntesisBox®. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® gateway IBOX-MBS-MBUS, enable full and transparent monitoring of M-Bus installations (energy meters, gas meters, etc.) from building management systems based in ModBus (Wonderware, Intellution, ABB, Schneneider, etc.).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox\\_Modbus\\_Server\\_M-Bus\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_Modbus_Server_M-Bus_datasheet_eng.pdf)



## IBOX-MBS-BAC

### Integration of any BACnet/IP device in your Modbus installation

#### BACnet devices

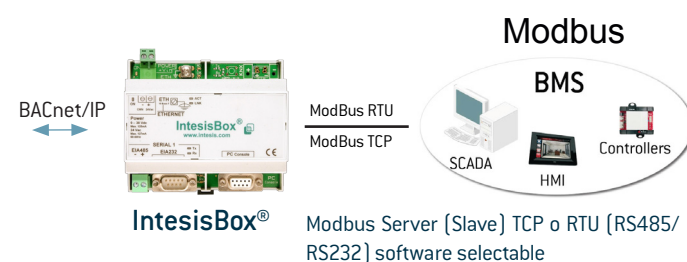
- HVAC
  - Air Conditioners
  - Chillers
  - thermostats
  - Fan-coil controllers
  - Automatons

- Meters
  - Electric meters
  - Energy meters
  - T° and Hr probes

#### Automation

- B.M.S.
- PLC
- HMI

and many others

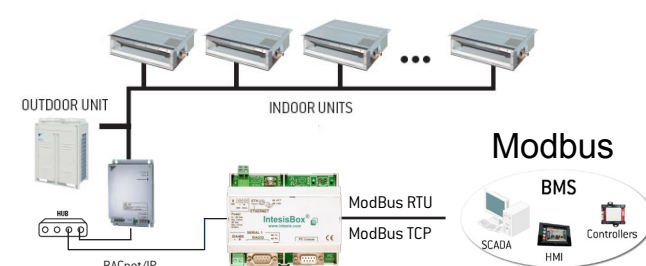


### IntesisBox®

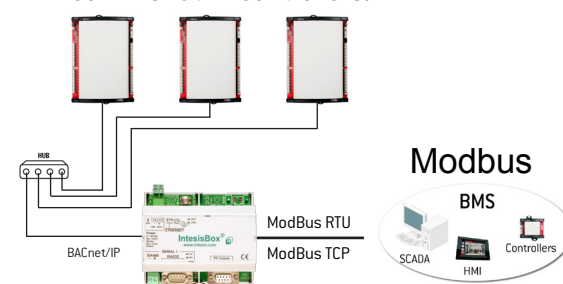
- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to BACnet and ModBus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

- Wonderware
- Intellution
- ABB
- and many others

Integration example:  
AC VRV DAIKIN equipped with BACnet gateway.



Integration example:  
Fan-coil BACnet/IP controllers.



## IntesisBox® IBOX-MBS-BAC Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-MBS-BAC connects with an Ethernet cable to the network where the BACnet devices to integrate are connected.

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

\* Compatible with the ASHRAE 135 – 2001 Annex J - BACnet/IP protocol.

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-BAC is a BACnet/IP client that reads/writes points of other BACnet/IP devices connected to the BACnet network. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. The IntesisBox® BACnet gateway can read other BACnet devices using continuous polling or subscription (COV). IntesisBox® Modbus interface supports Modbus TCP connection or Modbus RTU (RS-232 or RS-485), configurable by software, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-BAC offers an advanced integration of Air Conditioning systems with BACnet/IP interface in Modbus installations, such as Daikin, Mitsubishi Heavy, LG, etc. Integration of Fan-Coil controllers, meters, PLCs, HMI, etc. with BACnet/IP connection.

### 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)

## IBOX-MBS-BACMSTP

### Integration of any BACnet/MSTP device in your Modbus installation

#### BACnet devices

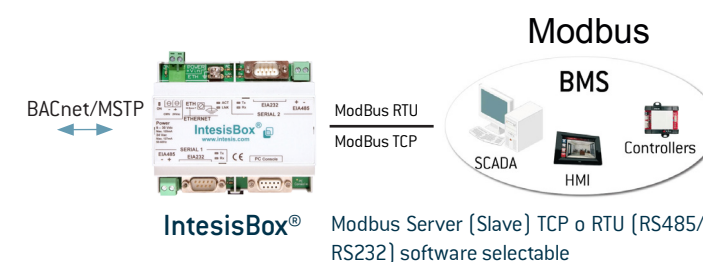
- HVAC
  - Air Conditioners
  - Chillers
  - thermostats
  - Fan-coil controllers
  - Automatons

- Meters
  - Electric meters
  - Energy meters
  - T° and Hr probes

#### Automation

- B.M.S.
- PLC
- HMI

and many others

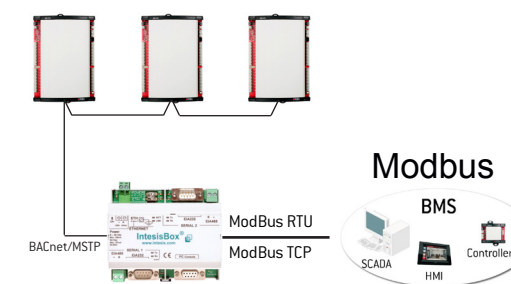


### IntesisBox®

- Bidirectional: Supervision 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 envelope

- Wonderware
- Intellution
- ABB
- and many others

Integration example:  
Fan-coil BACnet/MSTP controllers.



## IntesisBox® IBOX-MBS-BACMSTP Gateway

IntesisBox® IBOX-MBS-BACMSTP gateway have been specially designed, to allow supervision and bidirectional control of all the parameters and functionality of systems and devices with BACnet/MSTP connectivity from Modbus installations.

### EASY INSTALLATION

The IntesisBox® IBOX-MBS-BACMSTP gateway connects using RS485 (2 wires) to the BACnet devices.

- IBOX-MBS-BACMSTP-100 (Maximum 100 control points and 64 BACnet/MSTP devices)
- IBOX-MBS-BACMSTP-A (Maximum 500 control points and 64 BACnet/MSTP devices)
- IBOX-MBS-BACMSTP-B (Maximum 3000 control points and 64 BACnet/MSTP devices)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-BACMSTP is a BACnet/MSTP client that reads/writes points of other BACnet/MSTP devices connected to the BACnet network. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. The IntesisBox® BACnet gateway can read from other BACnet devices using continuous polling or subscription (COV). IntesisBox® Modbus interface supports Modbus TCP connection or Modbus RTU (RS-232 or RS-485), configurable by software, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-BACMSTP offers an advanced integration of Fan-Coil controllers, meters, PLCs, HMI, etc. with BACnet/MSTP connection.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.BACnet.MSTP.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.BACnet.MSTP.datasheet_eng.pdf)

## IBOX-MBS-LON

Integration of any LON device in your Modbus installation

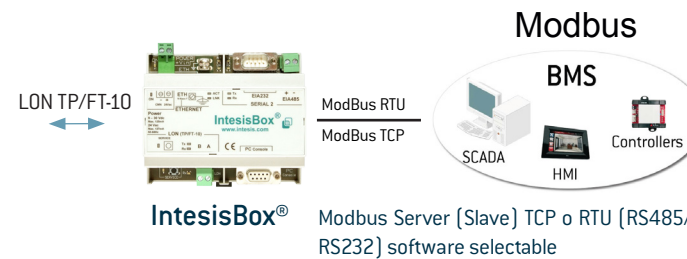
### LonWorks® devices

**HVAC**  
· Air Conditioners  
· Chillers  
· thermostats  
· Fan-coil controllers  
· Automotons

**Meters**  
· Electric meters  
· Energy meters  
· T° and Hr probes

**Automation**  
· B.M.S.  
· PLC  
· HMI

and many others

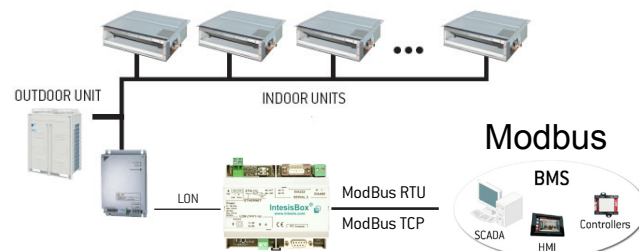


### IntesisBox®

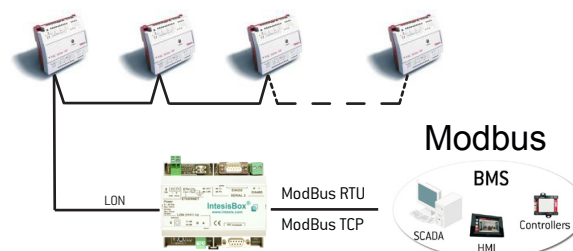
- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to LON and ModBus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

· Wonderware  
· Intellution  
· ABB  
and many others

Integration example:  
VRV DAIKIN equipped with LON gateway.



Integration example:  
LON Fan-coil controllers.



## IntesisBox® IBOX-MBS-LON Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-MBS-LON gateway needs to be connected to LonWorks® devices using 2 wire (TP/FT-10) connection.

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)

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® LON interface reads continuously by polling the configured LON devices, and for this reason no bindings between them and the IntesisBox® are needed. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. IntesisBox® can access the LON devices either using Neuron-Id (physical address) or subnet/node (commissioned devices). There is no need of commissioning the LON devices for this integration, thus no need of any LON expertise or commissioning tool, such as LonMaker, is required. IntesisBox® Modbus interface supports Modbus TCP connection or Modbus RTU (RS-232 or RS-485), configurable by software, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-LON offers an advanced integration of Air Conditioning systems with LonWorks® interface in Modbus installations, such as Daikin, Mitsubishi Heavy, LG, etc. Integration of Fan-Coil controllers, meters, PLCs, HMI, etc. with LonWorks® connection.

### 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)

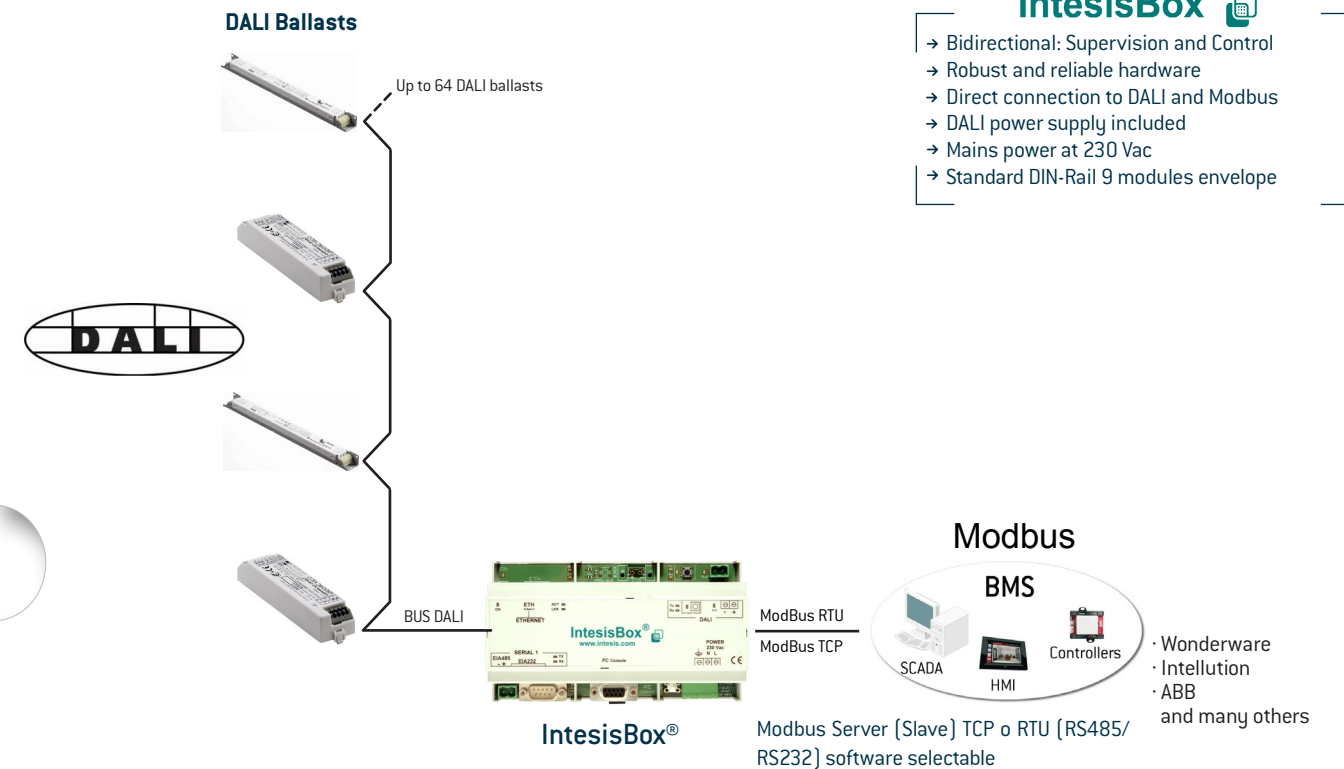
## IBOX-MBS-DALI

Integrate up to 64 DALI ballasts in your Modbus installation

Available in Q2 2011

### IntesisBox®

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to DALI and ModBus
- DALI power supply included
- Mains power at 230 Vac
- Standard DIN-Rail 9 modules envelope



## IntesisBox® IBOX-MBS-DALI Gateway

IntesisBox® IBOX-MBS-DALI gateway has been specially designed to allow supervision and bidirectional control of your DALI lighting system from Modbus installations.

### EASY INSTALLATION

IntesisBox® IBOX-MBS-DALI gateway must be connected using 2 wires to the DALI ballasts.

It's not necessary an external DALI power supply because the gateway powers the bus DALI (15V 250mA).

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-DALI is a DALI Master device that reads/writes DALI ballasts connected to the bus. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. IntesisBox® Modbus interface supports Modbus TCP connection or Modbus RTU (RS-232 or RS-485), software configurable, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-DALI offers an advanced integration of DALI ballasts, for example:

Digital control of real power level (dimming)

- Individual or predefined group (up to 16 groups) control of the ballasts.
- Arbitrary dimming/power level control between OFF and 100% or level predefined control (scenes).
- Use of predefined dimming ramps.

Current status reports

- to detect error conditions in ballasts or wiring.

### DATASHEET

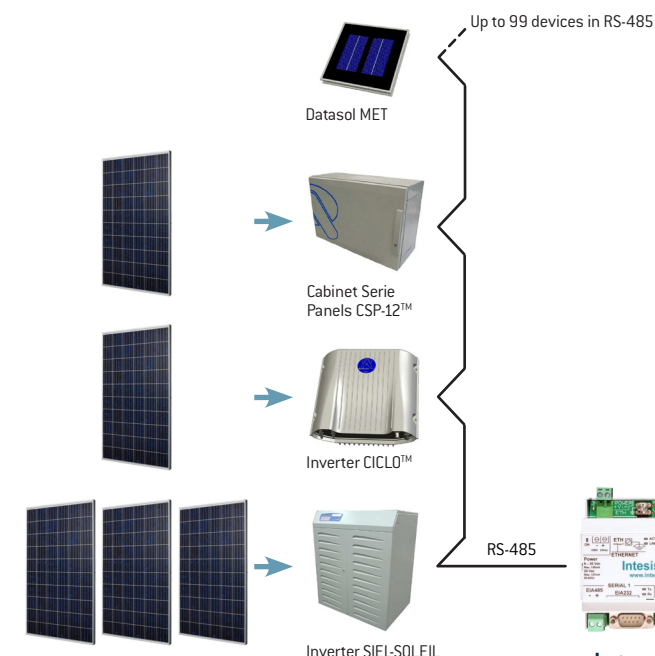
[http://www.intesis.com/pdf/IntesisBox\\_Modbus\\_Server\\_DALI\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_Modbus_Server_DALI_datasheet_eng.pdf)

## IBOX-MBS-ATERSA

Integrate inverters from your photovoltaic system in your Modbus installation.

Photovoltaic system

ATERSA devices



**IntesisBox®**

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to RS-485 and Modbus
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

Modbus

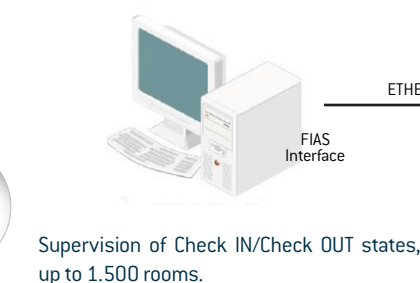
BMS



## IBOX-MBS-FIDELIO

Integrate your FIDELIO hotel management system in your Modbus installation

Fidelio hotel management system



**IntesisBox®**

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

Modbus

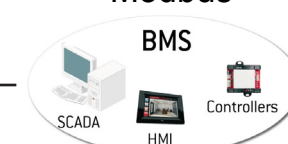
BMS



IntesisBox®

Modbus RTU  
Modbus TCP

Modbus Server (Slave) TCP o RTU (RS485/RS232), software selectable



## IntesisBox® IBOX-MBS-ATERSA Gateway

IntesisBox® IBOX-MBS-ATERSA gateway has been specially designed to allow supervision of all the operating parameters of the inverters (CICLO™ AND SEIL-SOLEIL), panels (CSP-12™) and device (DATASOL MET) of ATERSA, from any Modbus installation.

### EASY INSTALLATION

The IntesisBox® IBOX-MBS-ATERSA gateway needs to be connected using 2 wires (RS-485) to ATERSA devices.

- IBOX-MBS-ATERSA [Maximum of 99 ATERSA devices]

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® ATERSA interface reads continuously by polling the configured ATERSA devices. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. IntesisBox® shows every ATERSA device configured as a Modbus slave, providing a fix register map for each one of them. IntesisBox® Modbus interface supports Modbus TCP connection or Modbus RTU (RS-232 or RS-485), configurable by software, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-ATERSA offers an advanced integration of the photovoltaic collection system with ATERSA devices in any control system based in Modbus protocol, like Wonderware, Intellution, ABB and many more.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Atersa.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Atersa.datasheet_eng.pdf)

## IntesisBox® IBOX-MBS-FIDELIO Gateway

IntesisBox® IBOX-MBS-FIDELIO gateway has been specially designed to offer supervision of FIDELIO hotel management systems from your Modbus installations.

### EASY INSTALLATION

IntesisBox® IBOX-MBS-FIDELIO gateway has to be connected using ethernet cable to the same network of the Fidelio system through the FIAS communication interface.

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-FIDELIO is an IP device that reads Check IN and Check OUT states from up to 1.500 rooms of the Fidelio hotel management system, offering them like Modbus registers. All the read values are kept in the IntesisBox® memory to be used in the Modbus system when needed. The IntesisBox® Modbus interface supports Modbus TCP and Modbus RTU (RS232 or RS485), software configurable, and acts like a Modbus slave device. IntesisBox® Modbus series gateways are configured with the LinkBoxMB software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-FIDELIO offers an advanced integration of Fidelio hotel management systems in any control system based in Modbus protocol, like Wonderware, Intellution, ABB and many more.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Fidelio.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Fidelio.datasheet_eng.pdf)



## IBOX-MBS-TCP2RTU

Integrate any Modbus RTU Slave device in Modbus TCP

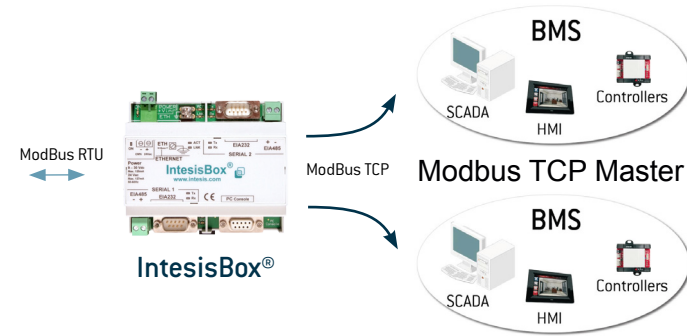
### Modbus RTU Slave devices

- HVAC**
- Air Conditioners
  - Chillers
  - thermostats
  - Fan-coil controllers
  - Automations

- Meters**
- Electric meters
  - Energy meters
  - T° and H° probes

- Automation**
- B.M.S.
  - PLC
  - HMI

and many others

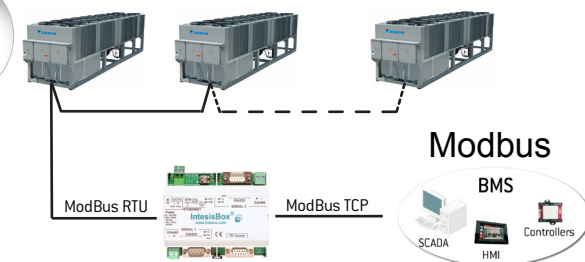


### IntesisBox®

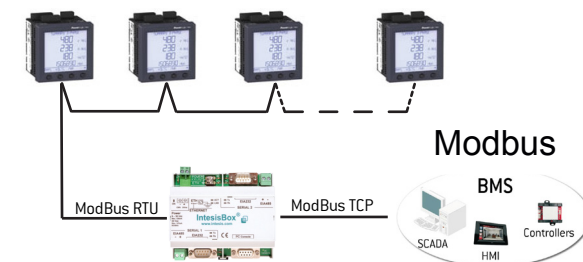
- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to ModBus RTU and TCP
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

Up to 4 Modbus TCP Master devices simultaneous

Integration example:  
Chillers with ModBus RTU.



Integration example:  
ModBus RTU electric meters.

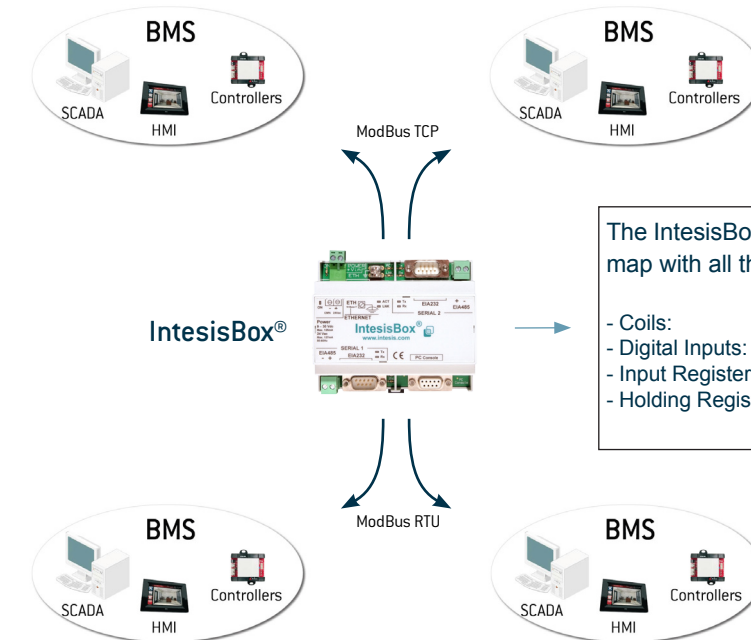


## IBOX-MBS-4SLAVE

Integrate up to 4 Modbus Master devices among themselves

Integration examples:

Integration of 2 Modbus TCP Master and 2 Modbus RTU Master.



### IntesisBox®

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection with ModBus TCP and RTU
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

The IntesisBox® IBOX-MBS-4SLAVE has a complete Modbus map with all the possible Modbus registers as specified:

- Coils: 0..65535 (100001..165536)
- Digital Inputs: 0..65535 (200001..265536)
- Input Registers: 0..65535 (300001..365536)
- Holding Registers: 0..65535 (400001..465536)

## IntesisBox® IBOX-MBS-TCP2RTU Gateway

IntesisBox® IBOX-MBS-TCP2RTU gateway has been specially designed to offer supervision and bidirectional control of all the parameters and functionality of systems and devices with Modbus RTU Slave connectivity from Modbus TCP Masters.

### EASY INSTALLATION

You must connect the IntesisBox® IBOX-MBS-TCP2RTU gateway using RS-485 or RS-232 bus to the Modbus RTU Slave devices.

- IBOX-MBS-TCP2RTU [254 Modbus RTU Slave devices / 32 Modbus TCP Master devices]

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-TCP2RTU allows access to Modbus RTU devices from Modbus TCP. Take the opportunity to have several Modbus TCP Master devices accessing the same Modbus RTU devices. IntesisBox® works transparently: ModBus TCP communication frames are converted to ModBus RTU, and viceversa, transparently. When there is more than one Master ModBus TCP connected, the ModBus RTU requests are alternating for each Master managing queues and bus access.

Simple configuration using LinkBoxMB software, supplied for free with the purchase of the IntesisBox®. It's only necessary to configurate: IP, NetMask, RS232 or RS485, baud rate, parity and stop bits. The ModBus TCP connection acts like a slave and the ModBus RTU acts like a master.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-TCP2RTU offers an advanced integration of air conditioning systems with Modbus RTU interface in Modbus TCP installations like Daikin, Ciatesa, Hitecsa, etc. Also integrate in Modbus TCP Fan-Coil controllers, Meters, PLCs, HMI, etc. In general any system in the building with Modbus RTU connectivity.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.MBS.TCP2RTU.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.MBS.TCP2RTU.datasheet_eng.pdf)

## IntesisBox® IBOX-MBS-4SLAVE Gateway

IntesisBox® IBOX-MBS-4SLAVE gateway has been specially designed to offer supervision and bidirectional control of all the parameters and functionality between systems with Modbus Master connectivity.

### EASY INSTALLATION

IntesisBox® IBOX-MBS-4SLAVE has 2 Modbus RTU SLAVE (RS-232/RS-485) ports and 2 Modbus TCP Slave (for 2 Modbus TCP Master devices) port.

- IBOX-MBS-4SLAVE (Maximum 2 Modbus RTU Master devices and 2 Modbus TCP Master devices simultaneously.)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-MBS-4SLAVE allows exchange of register values from up to 4 Modbus Master devices sharing the memory map from one slave device, where all of them write and read.

Simple configuration using LinkBoxMB software, supplied for free with the purchase of the IntesisBox®. It's only necessary to configurate: IP, NetMask, RS232 or RS485, baud rate, parity and stop bits. Both Modbus TCP and RTU ports act like slaves.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-4SLAVE offers the possibility to exchange information between 2, 3 and 4 independent Modbus installations. Integrate Modbus installations without Modbus Master devices limitations.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.MBS.4SLAVE.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.MBS.4SLAVE.datasheet_eng.pdf)

## FIRE PANELS INTEGRATION

### IntesisBox® IBOX-MBS-CERBERUS Gateway

IntesisBox® IBOX-MBS-CERBERUS gateway has been specially designed to offer supervision of Siemens fire panels CS11 and CS10, with the ISO 1745 protocol, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Cerberus.ISO1745\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Cerberus.ISO1745_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-FC330A Gateway

IntesisBox® IBOX-MBS-FC330A gateway has been specially designed to offer supervision of Siemens fire panels Synova® FC330A, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.FC330A.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.FC330A.datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-ALGORI Gateways

IntesisBox® IBOX-MBS-ALGORI gateway has been specially designed to offer supervision of fire panels Ademco Algorinet BC216, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Algorinet\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Algorinet_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-ESSER Gateways

IntesisBox® IBOX-MBS-ESSER, gateway has been specially designed to offer supervision of fire panels ESSER 8007/8008 and IQ8, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Esser\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Esser_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-KILSEN Gateways

IntesisBox® IBOX-MBS-KILSEN gateway has been specially designed to offer supervision of fire panels Kilsen KSA 7XX, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.KILSEN\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.KILSEN_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-ZITON Gateways

IntesisBox® IBOX-MBS-ZITON gateway has been specially designed to offer supervision of fire panels Ziton ZP3 and ZP5 from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.ZITON\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.ZITON_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-NID3000 Gateway

IntesisBox® IBOX-MBS-NID3000, gateway has been specially designed to offer supervision of fire panels Notifier ID3000, ID3002, ID50 and ID60, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.NID3000\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.NID3000_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-ID2NET Gateway

IntesisBox® IBOX-MBS-ID2NET, gateway has been specially designed to offer supervision of up to 64 fire panels Notifier ID3000 in ID2NET network, from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.NID2Net\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.NID2Net_datasheet_eng.pdf)

### IntesisBox® IBOX-MBS-XLS80 Gateway

IntesisBox® IBOX-MBS-XLS80 gateway has been specially designed to offer supervision of fire panels Honeywell XLS-80 from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.XLS80\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.XLS80_datasheet_eng.pdf)

Integration example:  
Fire panel Notifier with IBOX-MBS-NID3000



Notifier ID3000  
Notifier ID3002  
Notifier ID50  
Notifier ID60

RS-232



IntesisBox®

ModBus RTU  
ModBus TCP

Modbus

BMS



Modbus Server (Slave) TCP or RTU (RS485/  
RS232), software selectable

· Wonderware  
· Intellution  
· ABB  
and many others

## INTEGRATION OF SECURITY PANELS

### IntesisBox® IBOX-MBS-GALAXY Gateway

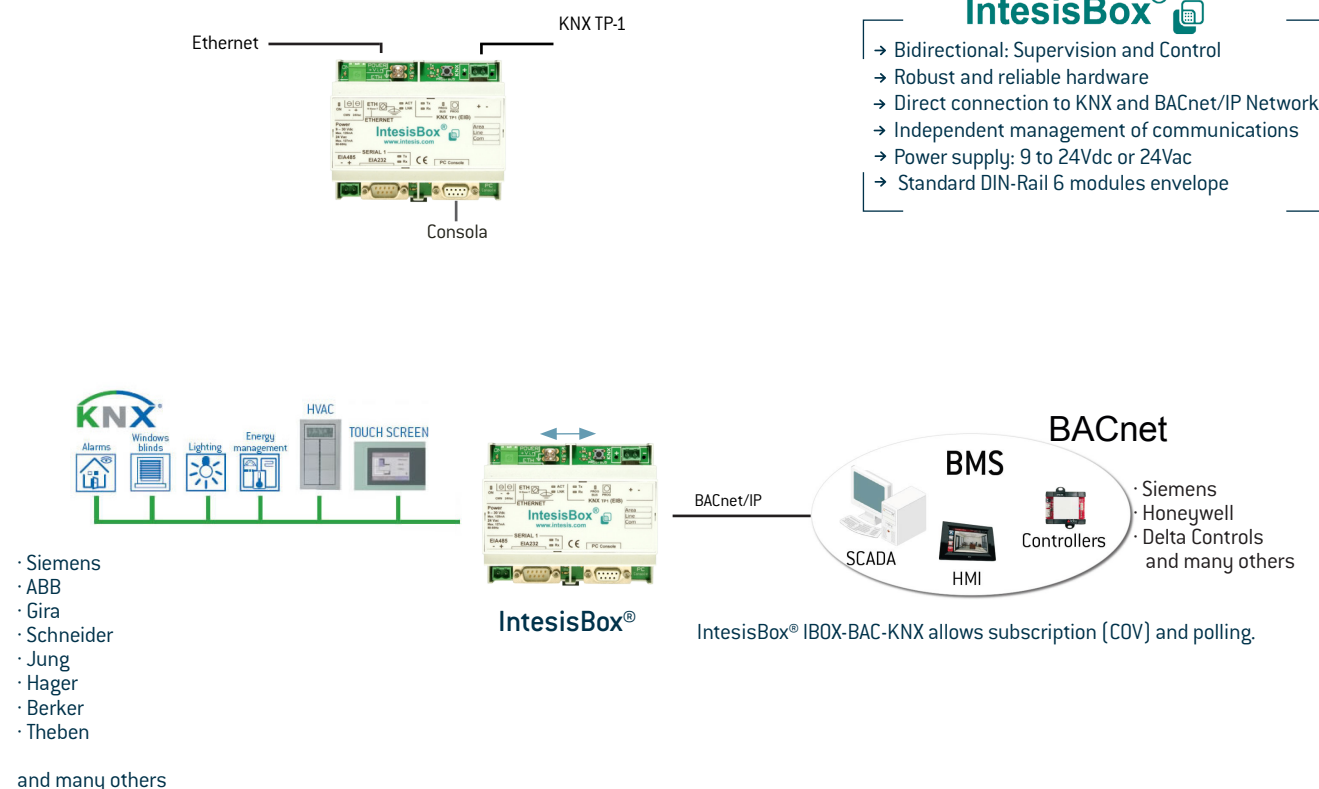
IntesisBox® IBOX-MBS-GALAXY, has been specially designed to offer supervision and of security panels Honeywell Galaxy from BMS systems based in Modbus.



[http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Galaxy.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.Modbus.Server.Galaxy.datasheet_eng.pdf)

## IBOX-BAC-KNX

Integrate any KNX device in your BACnet/IP installation



## IBOX-BAC-MBRTU IBOX-BAC-MBTCP

Integrate any Modbus device in your BACnet/IP installation

### Modbus devices

**HVAC**

- Air Conditioners
- Chillers
- thermostats
- Fan-coil controllers
- Automations

**Meters**

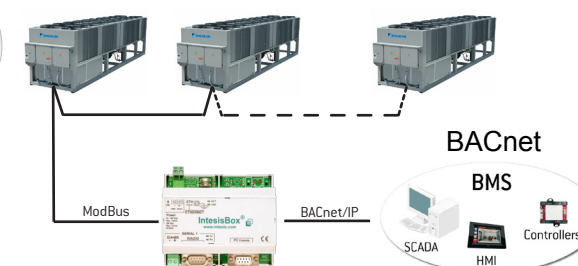
- Electric meters
- Energy meters
- T° and H° probes

**Automation**

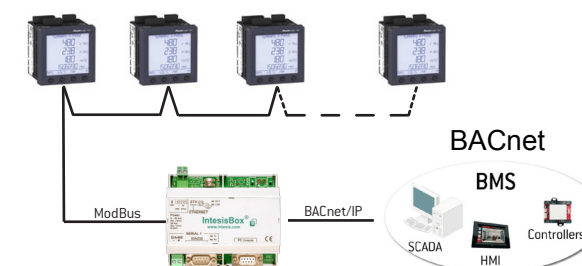
- B.M.S.
- PLC
- HMI

and many others

Integration example:  
Chillers with Modbus RTU.



Integration example:  
Modbus RTU electrical meters.



### IntesisBox®

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

Siemens  
Honeywell  
Delta Controls  
and many others

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

## IntesisBox® IBOX-BAC-KNX Gateway

IntesisBox® IBOX-BAC-KNX gateway has been specially designed to allow supervision and bidirectional control of KNX systems from BACnet/IP installations.

### EASY INSTALLATION

The IntesisBox® IBOX-BAC-KNX gateway connects directly to KNX twisted pair bus (TP-1).

Models available:

- IBOX-BAC-KNX-100 (Maximum 100 control points)
- IBOX-BAC-KNX-A (Maximum 500 control points)
- IBOX-BAC-KNX-B (Maximum 3000 control points)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-BAC-KNX BACnet interface behaves as a BACnet/IP server allowing other BACnet/IP devices to read and write its objects. Reads can be done either by continuous polling or using subscription (COV). IntesisBox® BACnet server series are configured with LinkBoxBAC, a Windows® compatible software supplied for free with the purchase of IntesisBox®. The KNX TP-1 (EIB) interface is connected directly to the KNX bus and it is optoisolated from the other electronic components. Any IntesisBox® variable can be individually configured to support different functionalities: allow read or write from KNX, send a write request to KNX when a value changes, or a read request when the IntesisBox® starts working or when the bus recovers. For each variable it can be defined a main group address and several listening group addresses. This is a useful functionality to allow actions to an IntesisBox® variable from several KNX group addresses.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-BAC-KNX, offers a complete and transparent integration of KNX installations (light control, blinds, ...) in building management systems based in BACnet/IP (Siemens, Honeywell, Delta Controls, Trend,...).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.BACnet\\_IP.Server.KNX.datasheet.eng.pdf](http://www.intesis.com/pdf/IntesisBox.BACnet_IP.Server.KNX.datasheet.eng.pdf)

## IntesisBox® IBOX-BAC-MBRTU / MBTCP Gateway

IntesisBox® IBOX-BAC-MBRTU / MBTCP gateways have been specially designed to offer supervision and bidirectional control for all the parameters and functionality of systems and equipment with ModBus connectivity from BACnet/IP installations.

### EASY INSTALLATION

IntesisBox® IBOX-BAC-MBRTU must be connected using 2 cable (RS-485) to the Modbus devices.

IntesisBox® IBOX-BAC-MBTCP must be connected using Ethernet cable to the network where Modbus devices are connected.

- IBOX-BAC-MBRTU-100 (Maximum 100 control points and 254 ModBus RTU slave devices)
- IBOX-BAC-MBRTU-A (Maximum 500 control points and 254 ModBus RTU slave devices)
- IBOX-BAC-MBRTU-B (Maximum 3000 control points and 254 ModBus RTU slave devices)
- IBOX-BAC-MBTCP-100 (Maximum 100 control points and 6 ModBus TCP slave devices)
- IBOX-BAC-MBTCP-A (Maximum 500 control points and 6 ModBus TCP slave devices)
- IBOX-BAC-MBTCP-B (Maximum 3000 control points and 6 ModBus TCP slave devices)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® ModBus Master gateway reads continuously by polling the configured ModBus slave devices. All the read values are kept in the IntesisBox® memory to be used in the BACnet/IP system when needed. Reads in the BACnet/IP side can be done by polling or subscription (COV).

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-BAC-MBRTU / MBTCP offers an advanced integration of air conditioning systems with a ModBus interface in BACnet/IP installations like Ciatesa, Hitecsa, Lennox, Carrier, etc.

Also integrate Meters, PLCs, HMI, etc. In general any system in the building with ModBus connectivity.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.BACnet\\_IP.Server.Modbus.RTU.master.datasheet.eng.pdf](http://www.intesis.com/pdf/IntesisBox.BACnet_IP.Server.Modbus.RTU.master.datasheet.eng.pdf)

[http://www.intesis.com/pdf/IntesisBox.BACnet\\_IP.Server.Modbus.TCP.master.datasheet.eng.pdf](http://www.intesis.com/pdf/IntesisBox.BACnet_IP.Server.Modbus.TCP.master.datasheet.eng.pdf)



## IBOX-BAC-LON

Integration of any LON device in your BACnet/IP installation

### LonWorks® devices

**HVAC**  
· Air Conditioners  
· Chillers  
· thermostats  
· Fan-coil controllers

**Meters**  
· Electric meters  
· Energy meters  
· T° and Hr probes

**Automation**  
· B.M.S.  
· PLC  
· HMI

and many others



**IntesisBox®**

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

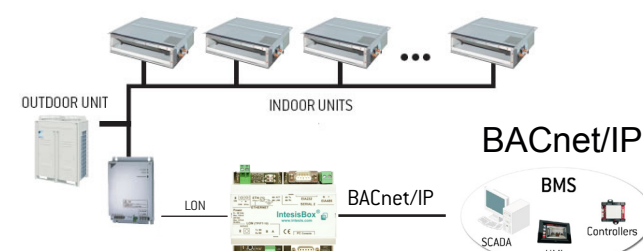
### IntesisBox®

- Bidirectional: Supervision 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 envelope

· Wonderware  
· Intellution  
· ABB  
and many others

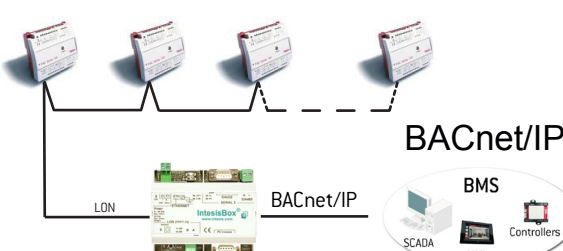
Integration example:

VRV DAIKIN equipped with LON gateway.



Integration example:

LON Fan-coil controllers.



## IntesisBox® IBOX-BAC-LON Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-BAC-LON gateway needs to be connected to LonWorks® devices using 2 wire (TP/FT-10) connection.

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)

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® LON interface reads continuously by polling the configured LON devices, and for this reason no bindings between them and the IntesisBox® are needed. All the read values are kept in the IntesisBox® memory to be used in the BACnet/IP system when needed. IntesisBox® can access the LON devices either using Neuron-Id (physical address) or subnet/node (commissioned devices). There is no need of commissioning the LON devices for this integration, thus no need of any LON expertise or commissioning tool, such as LonMaker, is required. Reads in the BACnet/IP side can be done by polling or subscription (COV). The BACnet/IP line of IntesisBox® gateways is configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-MBS-LON offers an advanced integration of Air Conditioning systems with LonWorks® interface in building management systems based in BACnet/IP (Siemens, Honeywell, Delta Controls, Trend,...) Integration of Fan-Coil controllers, meters, PLCs, HMI, etc. with LonWorks® connection also available.

### 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)

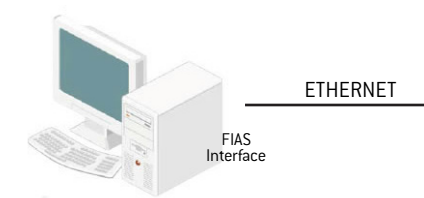
## IBOX-BAC-FIDELIO

Integrate FIDELIO hotel management systems in your BACnet/IP installation

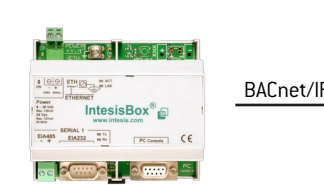
### IntesisBox®

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

### Fidelio hotel management system



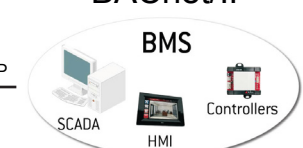
Supervision of Check IN/Check OUT states up to 1.500 rooms.



**IntesisBox®**

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

### BACnet/IP



· Siemens  
· Honeywell  
· Delta Controls  
and many others

## IntesisBox® IBOX-BAC-FIDELIO Gateway

IntesisBox® IBOX-BAC-FIDELIO gateway has been specially designed to offer supervision of FIDELIO hotel management systems from BACnet/IP installations.

### EASY INSTALLATION

IntesisBox® IBOX-BAC-FIDELIO gateway has to be connected using ethernet cable to the same network of the Fidelio system through the FIAS communication interface.

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-BAC-FIDELIO is an IP device that reads Check IN and Check OUT states from up to 1.500 rooms of the Fidelio hotel management system, offering them like binary inputs. All the read values are kept in the IntesisBox® memory to be used in the BACnet/IP system when needed. Reads in the BACnet/IP side can be done by polling or subscription (COV). The BACnet/IP line of IntesisBox® gateways is configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

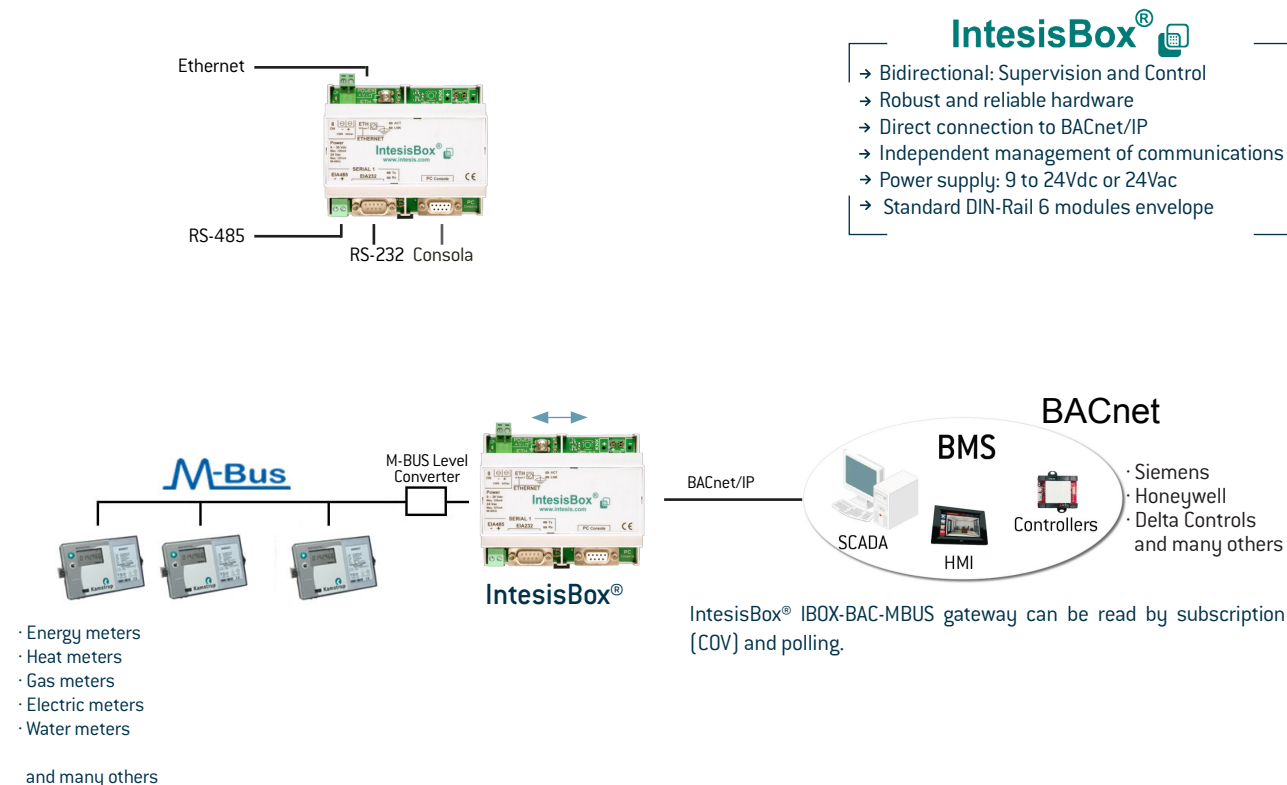
IntesisBox® IBOX-BAC-FIDELIO offers an advanced integration of Fidelio hotel management systems, in building management systems based in BACnet/IP (Siemens, Honeywell, Delta Controls, Trend,...).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox\\_BACnet\\_IP\\_Server\\_Fidelio\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_BACnet_IP_Server_Fidelio_datasheet_eng.pdf)

## IBOX-BAC-MBUS

Integrate any M-BUS device in your BACnet/IP installation



## IntesisBox® IBOX-BAC-MBUS Gateway

IntesisBox® IBOX-BAC-MBUS gateway has been specially designed to monitor all the registers of M-BUS meters from BACnet/IP installations.

### EASY INSTALLATION

IntesisBox® IBOX-BAC-MBUS gateway connects to M-Bus system using an external level converter M-Bus RS232 or RS485 at one side, and at the other side communicates with the supervision/control system with BACnet/IP protocol.

- IBOX-BAC-MBUS-100 (Maximum 100 control points and 10 devices)
- IBOX-BAC-MBUS-A (Maximum 600 control points and 60 devices)
- IBOX-BAC-MBUS-B (Maximum 2000 control points and 500 devices)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® polls continuously, or only when ordered from the BACnet/IP side, the MBUS meters to obtain updated readings. With each reading, the new value received is updated in the memory of IntesisBox® and is available to be read by polling or subscription (COV) from the BACnet side. The interrogation of a particular M-Bus device, or all M-Bus devices simultaneously, can be forced at any time from the BACnet side of the IntesisBox®. IntesisBox® BACnet server series gateways are configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

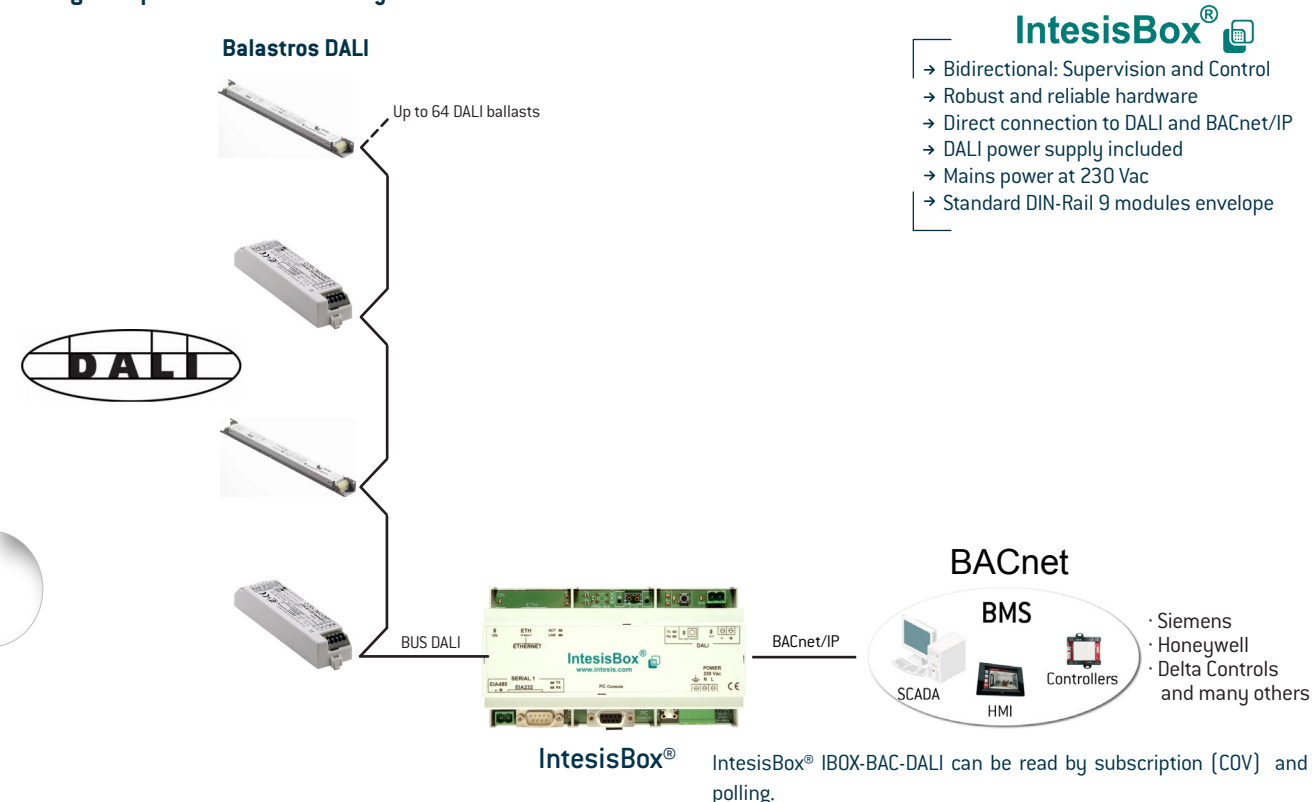
IntesisBox® gateway IBOX-BAC-MBUS, enable full and transparent monitoring of M-Bus installations (energy meters, gas meters, etc.) in building management systems based in BACnet/IP (Siemens, Honeywell, Delta Controls, Trend,...).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox\\_BACnet\\_IP\\_server\\_M-Bus.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_BACnet_IP_server_M-Bus.datasheet_eng.pdf)

## IBOX-BAC-DALI

Integrate up to 64 DALI ballasts in your BACnet/IP installation



## IntesisBox® IBOX-BAC-DALI Gateway

IntesisBox® IBOX-BAC-DALI gateway has been specially designed to allow supervision and bidirectional control of your DALI lighting system from BACnet/IP installations.

### EASY INSTALLATION

IntesisBox® IBOX-BAC-DALI gateway must be connected using 2 cables to the DALI ballasts. It's not necessary an external DALI power supply because the gateway powers the bus DALI (15V 250mA).

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-BAC-DALI is a DALI Master device that reads/writes DALI ballasts connected to the bus. All the read values are kept in the IntesisBox® memory to be read by polling or subscription (COV) in the BACnet side when needed. IntesisBox® BACnet server series gateways are configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-BAC-DALI offers an advanced integration of DALI ballasts, for example:

- Digital control of real power level (dimming)
  - Individual or predefined group (up to 16 groups) control of the ballasts.
  - Arbitrary dimming/power level control between OFF and 100% or level predefined control (scenes).
  - Use of predefined dimming ramps.
- Current status reports
  - To detect error conditions ballasts or wiring.

### DATASHEET

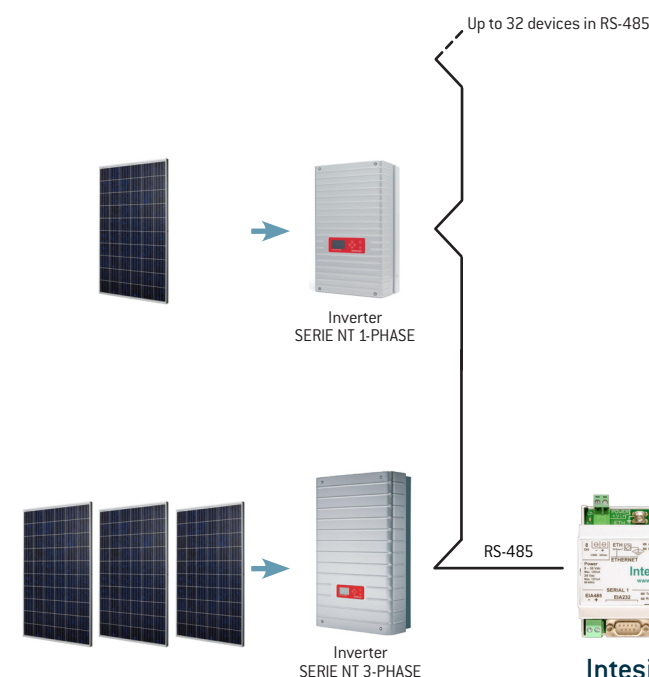
[http://www.intesis.com/pdf/IntesisBox\\_BACnet\\_IP\\_Server\\_DALI.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_BACnet_IP_Server_DALI.datasheet_eng.pdf)

## IBOX-BAC-SUNWAYS

Integrate inverters from SUNWAYS photovoltaic system installation in your BACnet/IP installation.

Photovoltaic system

SUNWAYS inverters



**IntesisBox®**

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to RS-485 and BACnet/IP
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope

### Compatible inverters

Line	Device Type
NT 1800	NT1800
	NT6000
NT 250V	NT4000
	NT2600
NT 850V	NT6000
	NT5000
	NT4000
	NT2600
NT 10000	NT10000

Others consult with the manufacturer

BACnet



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

## IntesisBox® IBOX-BAC-SUNWAYS Gateway

IntesisBox® IBOX-BAC-SUNWAYS gateway has been specially designed to allow supervision of all the operating parameters of the inverters SUNWAYS Serie NT from any BACnet installation.

### EASY INSTALLATION

The IntesisBox® IBOX-BAC-SUNWAYS gateway needs to be connected using 2 cables RS-485 to SUNWAYS devices.

- IBOX-BAC-SUNWAYS [Maximum 32 SUNWAYS devices]

### GREAT INTEGRATION FLEXIBILITY

The RS-485 interface from IntesisBox® reads continuously by polling the configured SUNWAYS devices. All the read values are kept in the IntesisBox® memory to be read by polling or subscription (COV) from the BACnet side. IntesisBox® shows each configured SUNWAYS device as a BACnet device, offering for each one of them a fix register map. IntesisBox® BACnet server series gateways are configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION

IntesisBox® IBOX-BAC-SUNWAYS offers an advanced integration of the photovoltaic collection system of SUNWAYS devices in any control system based in BACnet/IP protocol like: Siemens, Honeywell, Delta Controls, Trend, etc.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.BACnet\\_IP.Server.Sunways.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.BACnet_IP.Server.Sunways.datasheet_eng.pdf)

## IBOX-BAC-NID3000

Integrate a fire panel NID3000 in any BACnet installation

Available in Q2 2011

Integration example:

Fire panel Notifier ID series with IBOX-BAC-NID3000

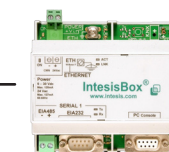
**IntesisBox®**

- Bidirectional: Supervision and Control
- Robust and reliable hardware
- Direct connection to RS-232 and BACnet/IP
- Independent management of communications
- Power supply: 9 to 24Vdc or 24Vac
- Standard DIN-Rail 6 modules envelope



Notifier ID3000  
Notifier ID3002  
Notifier ID50  
Notifier ID60

RS-232



IntesisBox®

IntesisBox® IBOX-BAC-NID3000 can be read by subscription (COV) and polling.

BACnet/IP

BACnet

BMS



Siemens  
Honeywell  
Delta Controls  
and many others

## IntesisBox® IBOX-BAC-NID3000 Gateway

IntesisBox® IBOX-MBS-NID3000, gateway has been specially designed to offer supervision and bidirectional control of the function parameters from the fire panels Notifier ID3000, ID3002, ID50 and ID60, from BMS systems based in BACnet/IP.

### EASY INSTALLATION

IntesisBox® IBOX-BAC-NID3000 must be connected using a RS-232 cable to the main board or to the optional ISO-RS232 of the fire panel.

### GREAT INTEGRATION FLEXIBILITY

With IntesisBox® IBOX-BAC-NID3000 you can integrate a fire panel Notifier ID3000, ID3002, ID50 o ID60. IntesisBox® connects directly to RS-232 port or to the optional port ISO-RS232 of the fire panel at one side, and to the BACnet/IP network at the other one. IntesisBox® has a fix map of variables allowing a simple integration of the fire panel. All the read values are kept in the IntesisBox® memory to be read by polling or subscription (COV) from the BACnet side. IntesisBox® BACnet server series gateways are configured with the LinkBoxBAC software for Windows® supplied free of charge with the purchase of IntesisBox®.

### ADVANCED INTEGRATION

IntesisBox® IBOX-BAC-NID3000 offers an advanced integration of Notifier fire panels in any control system based in BACnet/IP protocol like: Siemens, Honeywell, Delta Controls, Trend, etc.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.BACnet\\_IP.Server.NID3000.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.BACnet_IP.Server.NID3000.datasheet_eng.pdf)



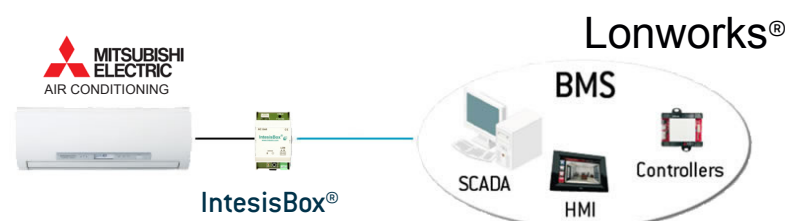
## ME-AC-LON-1

Integration of Mitsubishi Electric Air Conditioning units in your LON installation



### IntesisBox®

- Bidirectional: Supervision and Control
- Simple and fast installation
- Direct connection to LON bus and to the AC indoor unit
- No external power supply required
- Small dimensions: 93 x 53 x 58 mm



Compatibility list available at <http://www.intesis.com/pdf/IntesisBox.ME-AC-xxx-1.AC.Compatibility.pdf>

## IntesisBox® ME-AC-LON-1 Gateway

IntesisBox® ME-AC-LON-1 gateway has been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air Conditioners from Lonworks® installations.

### EASY INSTALLATION

The cable to connect the gateway to the connector CN105 or CN92 of the electronic board of the indoor unit is supplied.

### GREAT INTEGRATION FLEXIBILITY

Supervision and control of a complete set of network variables that allows an easy and simple integration with the basic parameters, and also a complete supervision and control of all the air conditioner functionality.

### SPECIFIC INTESISBOX® OBJECTS

IntesisBox® ME-AC-LON-1 includes network variables that increase the functionality from LON such as:  
Open window, Working hours counter, Enable/Disable device, Enable/disable remote controller, ...

### ADVANCED INTEGRATION DEL AIRE ACONDICIONADO

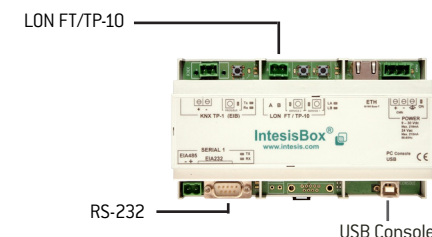
IntesisBox® ME-AC-LON-1 offers an advanced integration of Air conditioners in your LON projects, a complete bidirectional communication and simultaneous control from LON and the infrared Air Conditioner remote controller.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.ME-AC-LON-1.datasheet.eng.pdf>

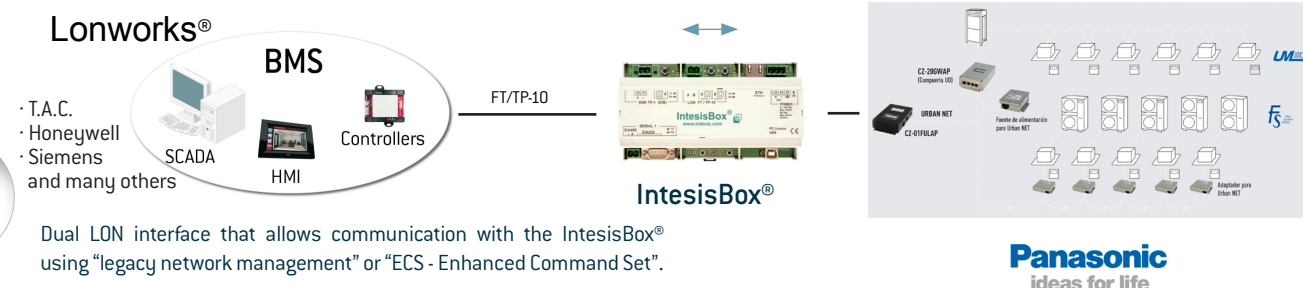
## IBOX-LON-PANURBAN

Integration of Panasonic Air Conditioning units in your LON installation



### IntesisBox®

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



Dual LON interface that allows communication with the IntesisBox® using "legacy network management" or "ECS - Enhanced Command Set".

**Panasonic**  
ideas for life

## IntesisBox® IBOX-LON-PANURBAN Gateway

IBOX-LON-PANURBAN gateway has been specially designed, in collaboration with PANASONIC, to allow supervision and bidirectional control of all the parameters and functionality of PANASONIC Air conditioners from Lonworks® installations.

### EASY INSTALLATION

IntesisBox® IBOX-LON-PANURBAN must be connected using a RS-232 cable to the CZ-01FULAP device from Panasonic.

### GREAT INTEGRATION FLEXIBILITY

With the IntesisBox® IBOX-LON-PANURBAN gateway, all the air conditioning installation appears like a node in the LonWorks® network, fully compatible with any standard LonWorks® commissioning tool [LonMaker® and others].  
IntesisBox® IBOX-LON-PANURBAN has a LON TP/FT-10 connection and doesn't require any configuration. Compatible with the air conditioning units connected to an URBAN NET network, available using the CZ-01FULAP interface from Panasonic.

### ADVANCED INTEGRATION WITH ANY DEVICE

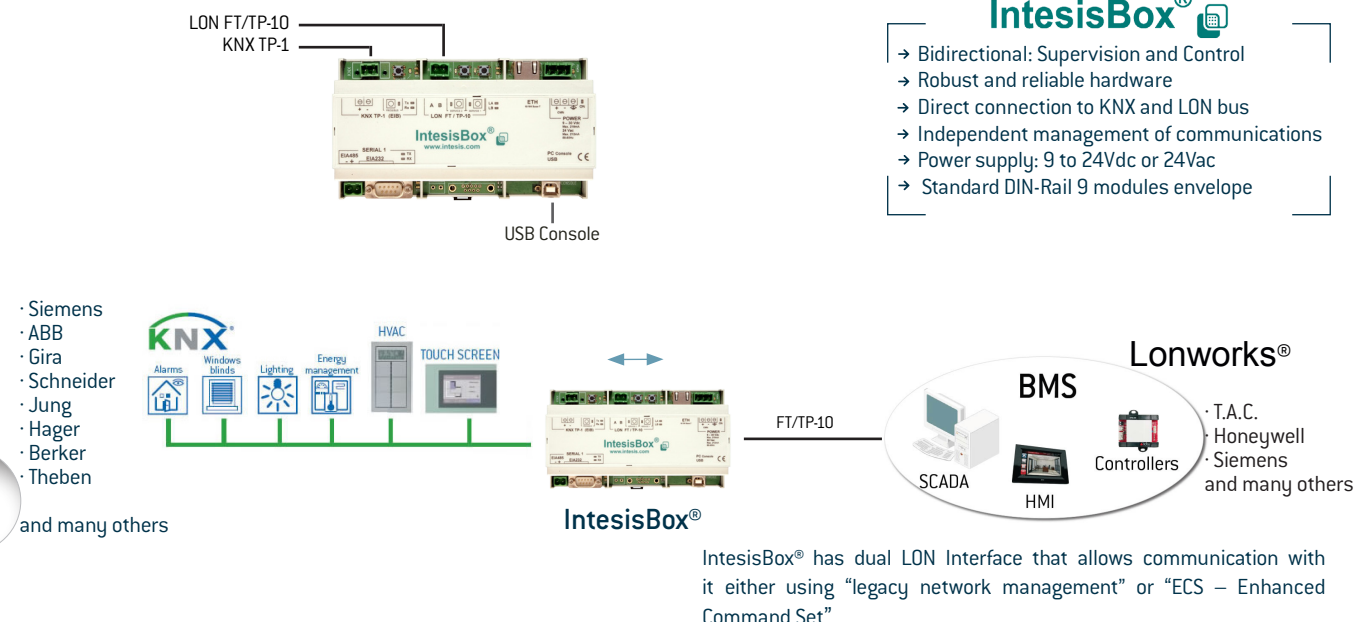
IntesisBox® IBOX-LON-PANURBAN gateway offers a full transparent integration of Panasonic air conditioning installations, in building management systems based in LonWorks® like TAC, Siemens, Honeywell, etc.

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.LON\\_PANURBAN.datasheet.eng.pdf](http://www.intesis.com/pdf/IntesisBox.LON_PANURBAN.datasheet.eng.pdf)

# IBOX-LON-KNX

Integration of any KNX device in your LON B.M.S.



## IntesisBox® IBOX-LON-KNX Gateway

IntesisBox® IBOX-LON-KNX gateway has been specially designed to allow supervision and bidirectional control of KNX systems from LonWorks® installations.

### EASY INSTALLATION

The IntesisBox® IBOX-LON-KNX gateway needs to be connected to the KNX devices using KNX twisted pair bus (TP-1), and to LonWorks® devices using LON twisted pair bus (FT/TP-10)

Models available:

- IBOX-LON-KNX-200 (Maximum 200 control points)
- IBOX-LON-KNX-A (Maximum 500 control points)
- IBOX-LON-KNX-B (Maximum 4000 control points)

### GREAT INTEGRATION FLEXIBILITY

With the IntesisBox® IBOX-LON-KNX gateway all the KNX installation is seen as a node in the LonWorks® network, with each KNX group address associated to a SNVT field, fully compatible with any standard LonWorks® commissioning tool (LonMaker and others). IntesisBox® LON and KNX interfaces are configured with LinkBoxLON, a Windows® compatible software supplied for free with the purchase of IntesisBox®. Once configured, LinkBoxLON is able to generate the XIF file from the LON interface or it can be acquired directly through the LonWorks® network. KNX group addresses can be imported from ETS CSV or ESF files and be linked by a simple drag & drop process.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-LON-KNX offers a complete and transparent integration of KNX installations (light control, blinds, ...) in building management systems based in LonWorks® (TAC, Siemens, Honeywell...).

### DATASHEET

[http://www.intesis.com/pdf/IntesisBox.LON.KNX.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.LON.KNX.datasheet_eng.pdf)

## ME-AC-ENO-1 ME-AC-ENO-1C

Integration of Mitsubishi Electric Air Conditioning units in your EnOcean installation



### IntesisBox®

- Bidirectional: Supervision 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 dimensions: 71 x 71 x 27 mm



Compatibility list available at: [http://www.intesis.com/pdf/IntesisBox\\_ME-AC-xxx-1.AC.Compatibility.pdf](http://www.intesis.com/pdf/IntesisBox_ME-AC-xxx-1.AC.Compatibility.pdf)

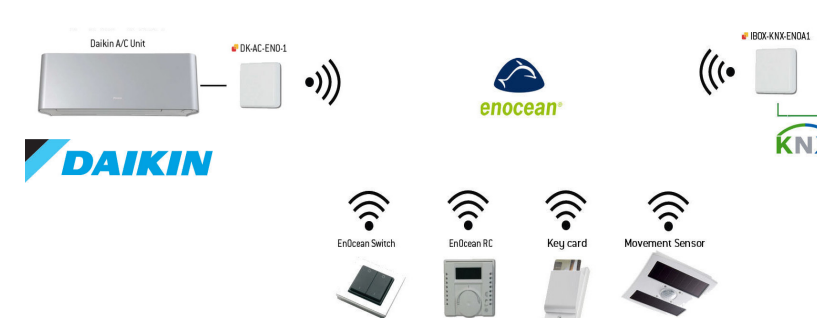
## DK-AC-ENO-1 DK-AC-ENO-1C

Integration of Daikin domestic lines of Air Conditioning units in your EnOcean installation



### IntesisBox®

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



Compatibility list available at: [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)

## IntesisBox® ME-AC-ENO-1 / 1C Gateways

IntesisBox® ME-AC-ENO-1 / 1C gateways have been specially designed, in collaboration with Mitsubishi Electric, to allow supervision and bidirectional control of all the parameters and functionality of Mitsubishi Electric Air conditioners from EnOcean installations.

### EASY INSTALLATION

They only need to be connected to the air conditioning indoor unit. The cable to connect the gateway to the connector CN105 or CN92 of the electronic board of the indoor unit is supplied.

Models available:

- ME-AC-ENO-1 (EnOcean Freq: 868 MHz. Europe)
  - ME-AC-ENO-1C (EnOcean Freq: 315 MHz. USA and Asia)
- \*\* For other world locations contact your supplier

### GREAT INTEGRATION FLEXIBILITY

It can be linked to all kind of sensors, actuators or gateways allowing a full control and supervision from several devices in parallel. The implementation of the newly approved Generic HVAC interface EEP's (along many others) give them even a higher integration to B.M.S. gateways.

### CONFIGURABLE ADVANCED ROOM CONTROL FUNCTIONALITIES

IntesisBox® ME-AC-ENO-1 / 1C include specific configurable behaviors when linked to devices such as window contact, key card or presence sensors, allowing an advance control of the AC units and leading to savings in Energy. It can work as an EnOcean repeater too.

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from an EnOcean temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same EnOcean thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® ME-AC-ENO-1 / 1C offer an advanced integration of Air conditioners in your EnOcean projects, a complete bidirectional communication and simultaneous control from EnOcean devices and the infrared Air Conditioner remote controller.

### DATASHEETS

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

## IntesisBox® DK-AC-ENO-1 / 1C Gateways

IntesisBox® DK-AC-ENO-1 / 1C gateways allow supervision and bidirectional control of all the parameters and functionality of DAIKIN Air conditioners from EnOcean installations.

### EASY INSTALLATION

They only need to be connected to the air conditioning indoor unit. The cable to connect the gateway to the connector S21 of the electronic board of the indoor unit is supplied.

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

### GREAT INTEGRATION FLEXIBILITY

It can be linked to all kind of sensors, actuators or gateways allowing a full control and supervision from several devices in parallel. The implementation of the newly approved Generic HVAC interface EEP's (along many others) give them even a higher integration to B.M.S. gateways.

### CONFIGURABLE ADVANCED ROOM CONTROL FUNCTIONALITIES

IntesisBox® DK-AC-ENO-1 / 1C include specific configurable behaviors when linked to devices such as window contact, key card or presence sensors, allowing an advance control of the AC units and leading to savings in Energy. It can work as an EnOcean repeater too.

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from an EnOcean temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same EnOcean thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® DK-AC-ENO-1 / 1C offer an advanced integration of Air conditioners in your EnOcean projects, a complete bidirectional communication and simultaneous control from EnOcean devices and the infrared Air Conditioner remote controller.

### DATASHEETS

[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)



## DK-RC-ENO-1 DK-RC-ENO-1C

Integration of Daikin SKY and VRV lines of Air Conditioning units in your EnOcean installation

Available in Q2 2011

Example 1. Gateway as Slave



- IntesisBox®**
- Bidirectional: Supervision and Control
  - Configurable advanced room control functionalities
  - Repeater functionality available
  - No external power supply required
  - Small dimensions: 71 x 71 x 27 mm

Example 2. Gateway as Master



Compatibility list available at: <http://www.intesis.com/pdf/IntesisBox.DK-RC-xxx-1.AC.Compatibility.pdf>

## IntesisBox® DK-RC-ENO-1 / 1C Gateways

IntesisBox® DK-RC-ENO-1 / 1C gateways allow supervision and bidirectional control of all the parameters and functionality of DAIKIN Air conditioners from EnOcean installations.

### EASY INSTALLATION

- Connect the gateway as **Slave** in parallel with the remote controllers BRC1D52 / BRC1D51A / BRC2C51 (Wall controller act as master) .
- Connect the gateway as **Master** in parallel with the remote controller BRC4C61 / BRC4C62 (Infrared receiver) as Slave.
- Connect the gateway directly to the P1/P2 bus of the indoor unit as Master when there is no Daikin remote controller.

Connection type: 2 wires without polarity. Total maximum distance: 500 meters.

Models available:

- DK-RC-ENO-1 [EnOcean Freq: 868 MHz. Europe]
- DK-RC-ENO-1C [EnOcean Freq: 315 MHz. USA and Asia]

\*\* For other world locations contact your supplier

### GREAT INTEGRATION FLEXIBILITY

It can be linked to all kind of sensors, actuators or gateways allowing a full control and supervision from several devices in parallel. The implementation of the newly approved Generic HVAC interface EEP's (along with many others) give them an even higher integration to B.M.S.

### CONFIGURABLE ADVANCED ROOM CONTROL FUNCTIONALITIES

IntesisBox® DK-RC-ENO-1 / 1C include specific configurable behaviors when linked to devices such as window contact, key card or presence sensors, allowing an advance control of the AC units and leading to savings in Energy. It can work as an EnOcean repeater too.

### VIRTUAL TEMPERATURE FUNCTIONALITY

Specially useful when it is imperative to use an external ambient temperature reference, either from an EnOcean temperature sensor or a thermostat, or when the heating and the air conditioner want to be controlled from the same EnOcean thermostat.

### ADVANCED INTEGRATION WITH AIR CONDITIONER

IntesisBox® DK-RC-ENO-1 / 1C offer an advanced integration of Air conditioners in your EnOcean projects, a complete bidirectional communication and simultaneous control from EnOcean and the infrared Air Conditioner remote controller.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox.DK-RC-ENO-1\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.DK-RC-ENO-1_datasheet_eng.pdf)

## USB-ENO USB-ENO-C

Integration of any EnOcean device in your USB enabled EnOcean compatible controller or PC Software

### EnOcean Devices

#### Switches

- Wireless Switches
- Key card readers
- Window contacts
- Industrial switches

#### Sensors

- Temperature Sensors
- Humidity Sensors
- Movement Sensors
- Luminance Sensors

#### Automatization

- Air Conditioners
- Actuators
- Room controllers

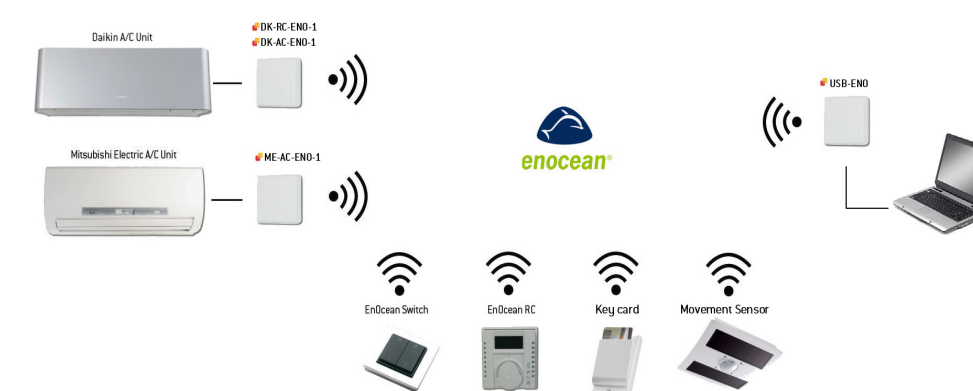
and many others



- IntesisBox®**
- Bidirectional: Supervision and Control
  - Unlimited transmitters supported
  - Up to 128 actuators
  - ESP2 and ESP3 Compatible
  - Repeater functionality available
  - USB Powered. No external power supply needed
  - Small dimensions: 71 x 71 x 27 mm

### Integration example:

Standard EnOcean devices controlled or supervised from an EnOcean PC software (SCADA, ...)



## IntesisBox® USB-ENO / C Gateways

IntesisBox® USB-ENO / C gateways allow supervision and bidirectional control of any EnOcean device from PC systems such as SCADAs as well as any configuration and monitoring USB enabled systems.

### EASY INSTALLATION

Plug and Play: IntesisBox® USB-ENO / C gateways only need to be connected to the USB port of the control system, typically a PC, and they will generate a virtual COM port being ready to be used.

Models available:

- USB-ENO [EnOcean Freq: 868 MHz. Europe]
- USB-ENO-C [EnOcean Freq: 315 MHz. USA and Asia]

\*\* For other world locations contact your supplier

### GREAT INTEGRATION FLEXIBILITY

It can be used with all kind of EnOcean devices such as sensors, actuators or gateways allowing a full control and supervision of these devices from Software applications. It can be configured to work as a 1 or 2 level repeater allowing to expand EnOcean Networks just by powering them either connected to the USB port or with a power adaptor (not supplied).

### REMOTE MANAGEMENT OF OTHER INTESISBOX® GATEWAYS

Together with the Software IS-ENO-MANAGER-A1 it allows to configure the advanced functionalities of other EnOcean IntesisBox® gateways.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox.USB-ENO\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox.USB-ENO_datasheet_eng.pdf)

## USB-ENO-ASCII USB-ENO-ASCII-C

Supervision and control of any IntesisBox® EnOcean Gateways for Air Conditioners from USB enabled controllers or PC software using simple text messages

### Devices soportados

**USB-ENO-ASCII**  
· ME-AC-ENO-1  
· DK-AC-ENO-1  
· DK-RC-ENO-1

**USB-ENO-ASCII-C**  
· ME-AC-ENO-1C  
· DK-AC-ENO-1C  
· DK-RC-ENO-1C



### IntesisBox®

- Bidirectional: Supervision and Control
- Up to 10 AC gateways
- Fast and Easy commissioning
- USB Powered. No external power supply needed
- Small dimensions: 71 x 71 x 27 mm

Integration example:

EnOcean AC gateways controlled and supervised from a PC software (SCADA, ...)



## IntesisBox® USB-ENO-ASCII / C Gateways

IntesisBox® USB-ENO-ASCII / C gateways allow supervision and bidirectional control of any IntesisBox® EnOcean AC gateway from PC systems such as SCADA's or others using simple text messages.

### EASY INSTALLATION

Plug and Play: IntesisBox® USB-ENO-ASCII / C gateways only need to be connected to the USB port of the control system, typically a PC, and they will generate a virtual COM port being ready to be used.

Models available:

- USB-ENO-ASCII (EnOcean Freq: 868 MHz. Europe)
- USB-ENO-ASCII-C (EnOcean Freq: 315 MHz. USA and Asia)

\*\* For other world locations contact your supplier

### GREAT INTEGRATION FLEXIBILITY

Integrate up to 10 IntesisBox® AC gateways in your control software. Fast and easy commissioning procedure. It allows a full control and supervision of the AC units through ASCII commands being the perfect solution to integrate the AC units in your already existing systems. The IntesisBox® ASCII Interface uses RS-232 communication. The AC variables can be easily read/written with simple text messages. The IntesisBox® can be configured to notify any change in the AC indoor unit variables to the control system, sending spontaneous messages. This working mode avoids the control system to perform continuous polling.

### REMOTE CONFIGURATION OF THE INTESISBOX® AC GATEWAYS WORKING PARAMETERS

IntesisBox® USB-ENO-ASCII / C have the capability of configuring some of the behaviors of the IntesisBox® AC gateways such as enabling/disabling the virtual temperature or modifying the periodic transmission time.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox\\_USB-ENO-ASCII.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_USB-ENO-ASCII.datasheet_eng.pdf)

## USB-ENO-ASCII-U USB-ENO-ASCII-U-C

Integration of any EnOcean device in a B.M.S. system based in ASCII protocol

### EnOcean Devices

**Switches**  
· Wireless Switches  
· Key card readers  
· Window contacts  
· Industrial switches

**Sensors**  
· Temperature Sensors  
· Humidity Sensors  
· Movement Sensors  
· Luminance Sensors

**Automatization**  
· Air Conditioners  
· Actuators  
· Room controllers

and many others



### IntesisBox®

- Bidirectional: Supervision and Control
- Up to 128 transmission channels supported
- Up to 99 receive channels supported
- Repeater functionality available
- USB Powered. No external power supply needed
- Small dimensions: 71 x 71 x 27 mm

Integration example:

Standard EnOcean devices controlled or supervised from an EnOcean PC software



## IntesisBox® USB-ENO-ASCII-U / C Gateways

IntesisBox® USB-ENO-ASCII-U / C gateways allow supervision and bidirectional control of all EnOcean devices from control systems based in ASCII protocol, such as SCADAS, B.M.S. or monitoring USB enabled systems using simple text messages.

### EASY INSTALLATION

Plug and Play: IntesisBox® USB-ENO-ASCII-U / C gateways only need to be connected to the USB port of the control system, typically a PC, and they will generate a virtual COM port being ready to be used.

Models available:

- USB-ENO-ASCII-U (EnOcean Freq: 868 MHz. Europe)
- USB-ENO-ASCII-U-C (EnOcean Freq: 315 MHz. USA and Asia)

\*\* For other world locations contact your supplier

### GREAT INTEGRATION FLEXIBILITY

It can be used with all kind of EnOcean devices such as sensors, actuators or gateways allowing full control and supervision of these devices from USB compatible systems. Always maintains a mirror from the associated EnOcean devices to be served to the ASCII system when requested. Also it can be configured to send spontaneous messages when a value change in an EnOcean device is detected, avoiding the continuous polling from the ASCII controller. The device is configured using ASCII commands and is provided with a communication interface in dll format to facilitate interpretation of the EnOcean EEP's.

It can be configured as a 1 or 2 level repeater, allowing the expansion of the EnOcean network by powering the device.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® USB-ENO-ASCII-U / C gateways, allow full and transparent integration of EnOcean installations (control of air conditioners, lights, blinds...) in technical management systems of buildings based in ASCII.

### DATASHEETS

[http://www.intesis.com/pdf/IntesisBox\\_USB-ENO-ASCII-U.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_USB-ENO-ASCII-U.datasheet_eng.pdf)

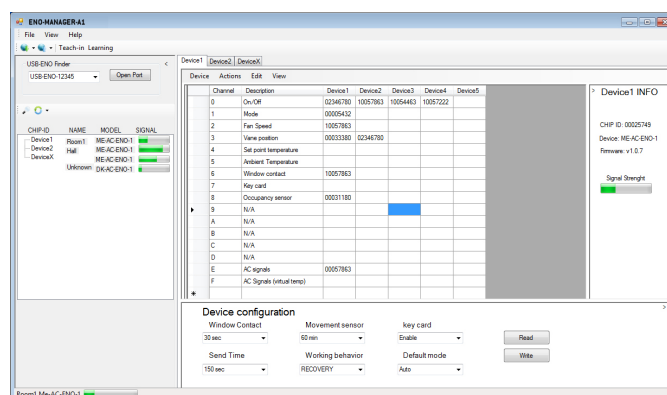
# IS-ENO-MANAGER-A1

Remote management and control of any IntesisBox® EnOcean AC gateway

Available at Q1 2011



- Remote management of IntesisBox® gateways
- Configuration of working parameters
- Perform remote Teach-in and learning
- Save and load the configurations
- Signal Strength information



Integration example:

EnOcean AC gateways being configured with IS-ENO-MANAGER-A1 through the USB-ENO gateway



## Intesis IS-ENO-MANAGER-A1 Software

Intesis IS-ENO-MANAGER-A1 Software has been specially designed to allow supervision and configuration of all the parameters and functionality of IntesisBox® EnOcean gateways.

### EASY DEVICE LOCATION

Intesis IS-ENO-MANAGER-A1 Software is able to locate and show the signal strength of the IntesisBox® EnOcean gateways, using remote management, in the coverage area. This allows locate them for configuration purposes as well as to check how well located they are allowing a better configuration of the installation to avoid coverage problems during its life.

### REMOTE LEARNING AND TEACH-IN

The software can be used to perform learning and teach-in procedures remotely. That allows to replicate linked devices as well as avoiding to access the gateways when modifications in the link tables need to be done.

### ADVANCED DEVICE CONFIGURATION

Configure the Advanced room control functionalities of IntesisBox® EnOcean gateways . The configuration can be read, modified and saved. That allows to load a previous configuration to the same device, replicate a configuration to a new device to replace it, ...

### DATASHEETS

[http://www.intesis.com/pdf/Intesis\\_ENO\\_Manager\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/Intesis_ENO_Manager_datasheet_eng.pdf)

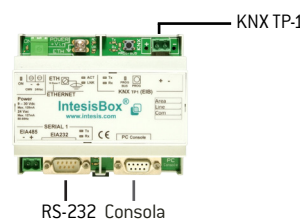


## IBOX-ASCII-KNX

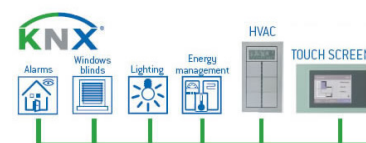
Integration of any KNX device in your programmable controller, HMI or PC software WITH RS232 serial port

### IntesisBox®

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



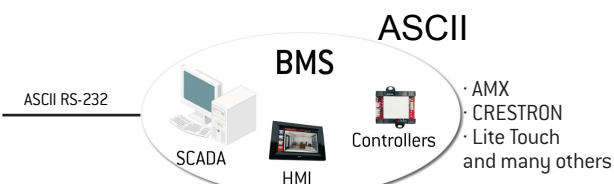
· Siemens  
· ABB  
· Gira  
· Schneider  
· Jung  
· Hager  
· Berker  
· Theben



and many others



IntesisBox®



IntesisBox® ASCII Serial port RS232 (male DB9, DTE connector).  
Baud rate selectable from 1.200 to 57.600 bps.  
8 data bits, no parity, 1 stop bit.

## IntesisBox® IBOX-ASCII-KNX Gateway

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

### EASY INSTALLATION

The IntesisBox® IBOX-ASCII-KNX gateway connects directly to KNX twisted pair bus (TP-1).

Models available:

- IBOX-ASCII-KNX (Maximum 4000 control points)

### GREAT INTEGRATION FLEXIBILITY

The IntesisBox® IBOX-ASCII-KNX gateway behaves as another device in the KNX system, keeping in memory an updated mirror of the values of KNX points configured, ready to serve it to the ASCII system when required. It is configured with LinkBoxEIB, a Windows® compatible software supplied free of charge with the purchase of IntesisBox®. The KNX TP-1 (EIB) interface is connected directly to the KNX bus and it is optoisolated from the other electronic components. IntesisBox® can send a read request for any group address when it starts working or when the KNX bus is lost. The IntesisBox® ASCII Interface uses RS232 communication (with selectable baud rate). The KNX variables can be easily read/written with simple text messages. The IntesisBox® can be configured to notify any change in the KNX variables to the ASCII system, sending spontaneous messages, this working mode avoids the ASCII controller to perform continuous polling.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-ASCII-KNX, offers a complete and transparent integration of KNX installations (light control, blinds, ...) in programmable control systems using simple text messages through RS232 serial protocol (AMX, Crestron, Lite Touch,...).

### DATASHEET

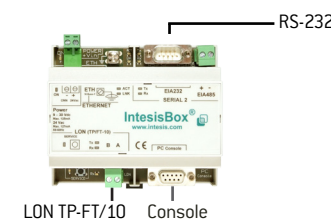
[http://www.intesis.com/pdf/IntesisBox\\_ASCII.Server.KNX.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_ASCII.Server.KNX.datasheet_eng.pdf)

## IBOX-ASCII-LON

Integrate any LON device in your ASCII installation

### IntesisBox®

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



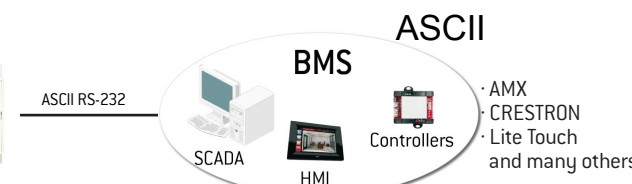
**HVAC**  
· Air Conditioners  
· Chillers  
· thermostats  
· Fan-coil controllers  
· Automations

**Automation**  
· B.M.S.  
· PLC  
· HMI  
and many others

**Meters**  
· Electric meters  
· Energy meters  
· T° and Hr probes



IntesisBox®



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.

## IntesisBox® IBOX-ASCII-LON Gateway

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

### EASY INSTALLATION

IntesisBox® IBOX-ASCII-LON must be connected using 2 cable (TP-FT/10) to LON devices.

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

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-ASCII-LON gateway reads continuously by polling the configured LON devices, and for this reason no bindings between them and the IntesisBox® are needed. All the read values are kept in the IntesisBox® memory to be used in the LON system when needed. IntesisBox® can access LON devices using addressing based in Neuron-Id (physical address) or in subnet/node (commissioned devices). If necessary IntesisBox® can declare the LON devices as commissioned, without the need for any integration tool (like LonMaker). IntesisBox® IBOX-ASCII-LON gateway is configured with LinkBoxASCII software, a software for Windows® supplied free of charge with the purchase of the IntesisBox®. The ASCII interface of the IntesisBox® uses RS-232 serial communication (with configurable baud rate). LON variables can be read/write easily from the ASCII side, using simple text messages. IntesisBox® can be configured to notify the ASCII side any value change detected, by using spontaneous messages sent through the ASCII interface. This means the ASCII controller doesn't need to use continuous polling.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-ASCII-LON gateway offers a full transparent integration in LON installations, in building management systems based in ASCII like AMX, Crestron, Lite Touch, etc.

### DATASHEET

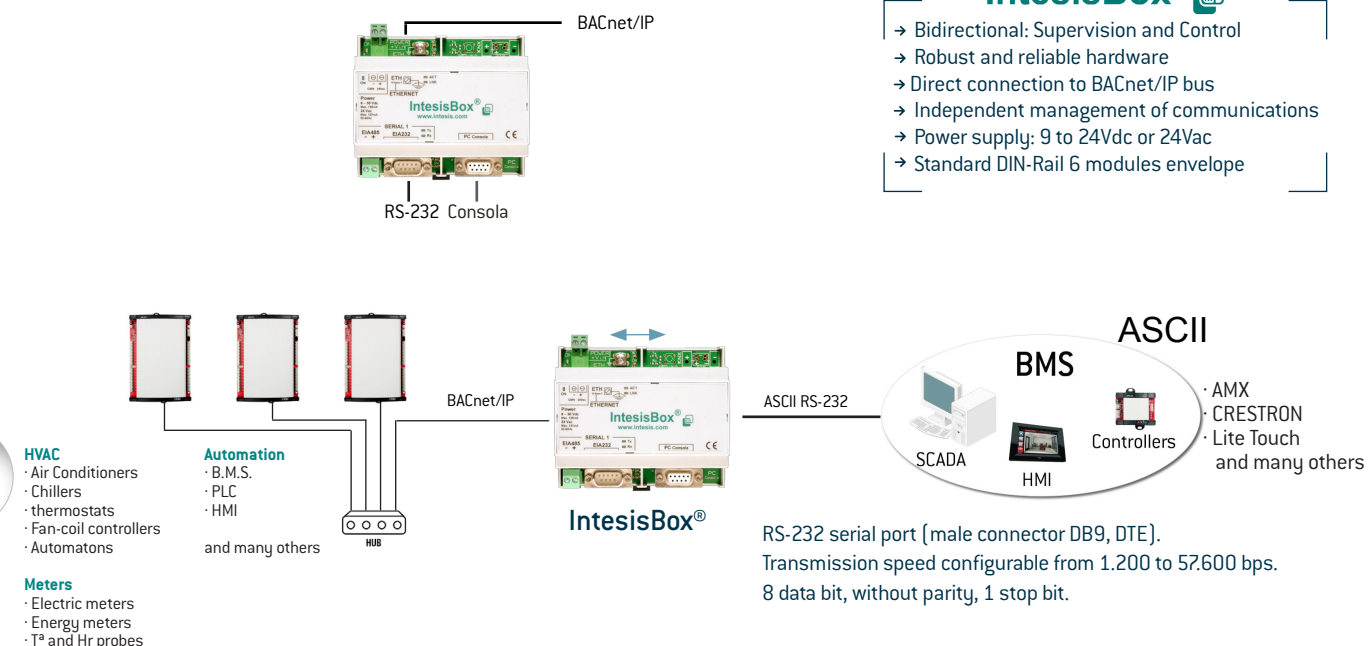
[http://www.intesis.com/pdf/IntesisBox\\_ASCII.Server.LON.datasheet\\_eng.pdf](http://www.intesis.com/pdf/IntesisBox_ASCII.Server.LON.datasheet_eng.pdf)

## IBOX-ASCII-BAC

Integrate any BACnet/IP device in your ASCII installation

### IntesisBox®

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



## IntesisBox® IBOX-ASCII-BAC Gateway

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

### EASY INSTALLATION

IntesisBox® IBOX-ASCII-BAC must be connected with an Ethernet cable to the network where the other BACnet devices are connected.

- IBOX-ASCII-BAC-A (Maximum 500 control points and 32 BACnet/IP devices)
- IBOX-ASCII-BAC-B (Maximum 2000 control points and 32 BACnet/IP devices)

### GREAT INTEGRATION FLEXIBILITY

IntesisBox® IBOX-ASCII-BAC is a BACnet/IP device that reads/writes points from other BACnet/IP devices connected to a BACnet network. All the updated read values are kept in its memory to interact immediatly with the ASCII system when necessary. BACnet interface of IntesisBox® supports readings of other BACnet devices by using continuous polling or subscription (COV). IntesisBox® IBOX-ASCII-BAC gateway is configured with LinkBoxBAC software, a software for Windows® supplied at no cost purchasing the IntesisBox®. The ASCII interface of the IntesisBox® uses RS-232 serial communication (with configurable baud rate). BACnet/IP objects can be read/write easily from the ASCII side, using simple text messages. IntesisBox® can be configured to notify the ASCII side any value change detected, by using spontaneous messages sent through the ASCII interface. This means the ASCII controller doesn't need to use continuous polling.

### ADVANCED INTEGRATION WITH ANY DEVICE

IntesisBox® IBOX-ASCII-BAC gateway offers a full transparent integration of BACnet devices in building management systems based in ASCII like AMX, Crestron, Lite Touch, etc.

### DATASHEET

<http://www.intesis.com/pdf/IntesisBox.ASCII.Server.Bacnet.IP.Client.datasheet.eng.pdf>

# OPC SERVER INTEGRATION

## IS-OPC-NID3K OPC SERVER

The IS-OPC-NID3K OPC Server has been specially designed to offer supervision of fire panels Notifier ID3000, ID3002, ID50, ID60 in ID2net network, from Scada systems with OPC Client driver.

### DATASHEET

[http://www.intesis.com/pdf/Intesis\\_Opc\\_Server\\_NID3000\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/Intesis_Opc_Server_NID3000_datasheet_eng.pdf)

Integration example:  
Fire panel Notifier with IS-OPC-NID3K



Notifier ID3000  
Notifier ID3002  
Notifier ID50  
Notifier ID60

RS-232

Serial - Ethernet  
bridge (optional)



Serial - Ethernet  
bridge (optional)

RS-232



SCADA

**Intesis**  
**OPC**  
Server

· Wonderware  
· Intellution  
· ABB  
and many others

## IS-OPC-ESSER OPC SERVER

IS-OPC-ESSER OPC server has been specially designed to offer supervision of fire panels ESSER 8007/8008 and IQ8, from Scada systems with OPC Client driver.

### DATASHEET

[http://www.intesis.com/pdf/Intesis\\_Opc\\_Server\\_Esser\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/Intesis_Opc_Server_Esser_datasheet_eng.pdf)

## IS-OPC-AM2020 OPC SERVER

IS-OPC-AM2020 OPC Server has been specially designed to offer supervision of fire panels Notifier AM2020, from Scada systems with OPC Client driver.

### DATASHEET

[http://www.intesis.com/pdf/Intesis\\_Opc\\_Server\\_NAM2020\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/Intesis_Opc_Server_NAM2020_datasheet_eng.pdf)

## OPC SERVER IS-OPC-IBOX-MBS

IS-OPC-IBOX-MBS OPC Server has been specially designed to convert the Modbus TCP interface of the IntesisBox® IBOX-MBS-BAC gateway to an OPC Server interface, offering supervision and bidirectional control of the BACnet/IP devices connected, from Scada systems with OPC Client driver.

### DATASHEET

[http://www.intesis.com/pdf/Intesis\\_Opc\\_Server\\_BACnet\\_datasheet\\_eng.pdf](http://www.intesis.com/pdf/Intesis_Opc_Server_BACnet_datasheet_eng.pdf)







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[www.intesis.com](http://www.intesis.com)

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