

Making Building Automation go Jurther









**Modbus Products** 

October 2008

Overview	of products	

Modbus Server (slave) gateways and interfaces designed for integration of third party systems into Modbus based control systems

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IntesisBox® Modbus Slave - Mitsubishi Electric A.C. (Domestic/Mr.Slim series)
IntesisBox® Modbus Server - Mitsubishi Electric A.C. (City Multi)
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IntesisBox® Modbus Server - ADEMCO Algorinet (BC216-x)
IntesisBox® Modbus Server - ADEMCO Galaxy (SIA Protocol)
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Modbus master (client) gateways designed for integration of Modbus devices or systems into other control systems (BACnet, KNX....)

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IntesisBox<sup>®</sup> KNX - Modbus RTU master
IntesisBox<sup>®</sup> KNX - Modbus TCP master
IntesisBox<sup>®</sup> BACnet/IP server - Modbus RTU master
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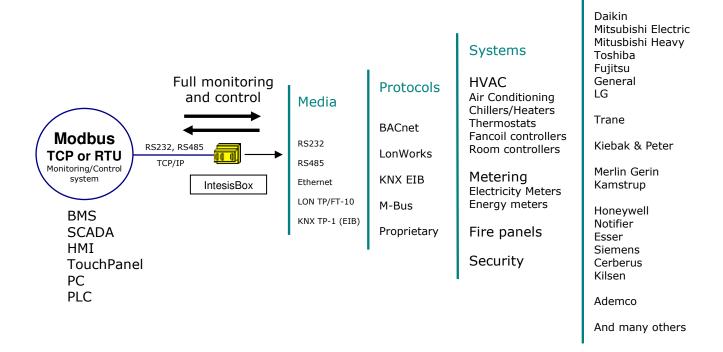




Manufacturers

## IntesisBox® Modbus Server series

Modbus Server (slave) gateways and interfaces designed for integration of third party systems into Modbus based control systems







## IntesisBox<sup>®</sup> Modbus Slave - Mitsubishi Electric A.C. (Domestic/Mr.Slim series)

Ref. ME-AC-MBS-1



## Modbus RTU slave interface for Domestic & Mr.Slim (commercial) series of Mitsubishi Electric air conditioners.

- The ME-AC-MBS-1 interface has been designed in co-operation with Mitsubishi Electric to offer full monitoring/control of Domestic & Mr.Slim series of air conditioners by any Modbus RTU master device.
- It connects to the Modbus RTU network (RS485 bus) in one side, and directly to the PCB of the A.C. indoor unit in the other side, no external power is required. The cable to connect to the A.C. indoor unit is also included in the scope of delivery of the interface.
- Each A.C. indoor unit to integrate requires one ME-AC-MBS-1 interface. The interface in mountable on DIN rail, wall, or even inside the A.C. indoor unit in some models. Reduced dimensions 90 x 53 x 58 mm.
- Easy configuration (slave address, baud rate, A.C. model) by means of Modbus registers as well as on-board DIP-switches externally accessible. Slave address can be from 1 to 254, which means that up to 254 A.C. indoor units can be controlled by a single Modbus master device (repeaters may be required in the RS485 bus for long distances or when more than 32 devices are connected).
- Simultaneous use of the A.C. IR remote control and the ME-AC-MBS-1 is allowed, the same control functions of the IR remote control are possible with the ME-AC-MBS-1, and some others really useful as for example to stop the unit when the window of the room is open.
- Fully bi-directional monitoring and control of the A.C. unit: Operation Mode, Set Point and Ambient Temperature, Vane Position, Alarms...





## IntesisBox® Modbus Server - Mitsubishi Electric A.C. (City Multi)

Ref. ME-AC-MBS-50 / ME-AC-MBS-100 ME-AC-MBS-150 / ME-AC-MBS-200



## Modbus gateway for City Multi (professional) series of Mitsubishi Electric air conditioners.

- The ME-AC-MBS-50/100/150/200 gateway has been designed in co-operation with Mitsubishi Electric to offer full monitoring/control of City Multi (professional) series of air conditioners by any Modbus master or client device (RTU or TCP).
- It connects directly to the Modbus network in one side, and in the other side it communicates to the City Multi system through the Mitsubishi Electric G-50A or GB-50A interface. For this integration it is required the Mitsubishi Electric G-50A or GB-50A interface be installed in the City Multi system, the G50 gives access to up to 50 groups of A.C. indoor units.
- Independent monitoring/control (bi-directional) from Modbus of each group of A.C. indoor units, of multiple parameters (Ambient Temperature, Set Point Temperature, Operation Mode, Fan Speed...). In the City Multi system the control unit is the group of indoor units, and each group can have from 1 to 16 associated indoor units. Nevertheless, individual control of single indoor units is also possible by associating a single indoor unit per each group in the G50.
- Each IntesisBox model ME-AC-MBS-50, 100, 150 and 200 supports respectively control of up to 50, 100, 150, and 200 groups.
- All the functions allowed by the A.C. remote control are also allowed from Modbus through the IntesisBox.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*





## IntesisBox® Modbus Server - BACnet/IP client

Ref. IBOX-MBS-BAC-A / IBOX-MBS-BAC-B



Gateway for monitor and control DAIKIN air conditioning systems from Modbus (RTU or TCP) master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...), and in general to monitor/control any BACnet/IP system or device from Modbus.

- IBOX-MBS-BAC-A and IBOX-MBS-BAC-B have been designed to offer a full integration (monitor and control) of DAIKIN air conditioners from Modbus control systems, specially suited for big installations. The gateway not only allows DAIKIN integration but many other air conditioning brands, and in general integration into Modbus of any BACnet/IP device or system.
- It connects directly to the Modbus network in one side (RS232, RS485, ETH), and in the other side it communicates via BACnet/IP to the DAIKIN system through the Daikin D-BACS interface. The Daikin D-BACS BACnet interface (ref. DMS502B51) is required to be installed in the Daikin system for this integration.
- Independent monitoring/control (bi-directional) from Modbus of each DAIKIN indoor unit or group of units, of multiple parameters (Ambient and Set Point Temperature, Operation Mode, Fan Speed...).
- IBOX-MBS-BAC-A supports up to 500 points and communication to one BACnet/IP device, IBOX-MBS-BAC-B supports up to 3000 points and communication to up to 16 BACnet/IP devices.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for integration of many brands of air conditioning (DAIKIN, Mitsubishi Heavy, Toshiba, Fujitsu-General...) extremely easy and quick, almost plug & play.*





### IntesisBox® Modbus Server - LON

Ref. IBOX-MBS-LON-A / IBOX-MBS-LON-B



Gateway for monitor and control of DAIKIN air conditioning systems from Modbus (RTU or TCP) master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...), and in general to monitor/control any LON (TP/FT-10) system or device from Modbus.

- IBOX-MBS-LON-A and IBOX-MBS-LON-B have been designed to offer a full integration (monitoring and control) of DAIKIN VRV air conditioners into Modbus systems, specially suited for small / medium size installations. The gateway not only allows DAIKIN integration but many other air conditioning brands, and in general integration into Modbus of any LON (TP/FT-10) device or system.
- It connects directly to the Modbus network in one side (RS232, RS485, ETH), and in the other side it communicates via LON (TP/FT-10) to the DAIKIN system through the Daikin DMS-IF interface. The Daikin DMS-IF LonWorks® interface (ref. DMS504B51) is required to be installed in the Daikin system for this integration.
- Independent monitoring/control (bi-directional) from Modbus of each Daikin indoor unit or group of units, of multiple parameters (Ambient and Set Point Temperature, Operation Mode, Fan Speed...).
- IBOX-MBS-LON-A supports up to 500 points and communication to up to 64 LON devices, IBOX-MBS-LON-B supports up to 4000 points and communication to up to 128 LON devices.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for integration of many brands of air conditioning (DAIKIN, Mitsubishi Heavy, Mitsubishi Electric, Toshiba, Fujitsu-General, Samsung, LG...) extremely easy and quick, almost plug & play.*





## IntesisBox® Modbus Server - KNX / EIB

Ref. IBOX-MBS-KNX-A / IBOX-MBS-KNX-B



Gateway for monitor and control of KNX EIB installations from Modbus (RTU or TCP) master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- IBOX-MBS-KNX-A and IBOX-MBS-KNX-B have been designed to offer full monitoring and control of KNX EIB installations from Modbus RTU or TCP master or client devices.
- It connects directly to the EIB bus in one side, and in the other side it communicates to the monitoring/control system with Modbus RTU or TCP protocol.
- Allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.
- IBOX-MBS-KNX-A supports up to 500 points, IBOX-MBS-KNX-B supports up to 3000 points.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*



## IntesisBox® Modbus Server - M-Bus (EN 13757-3)

Ref. IBOX-MBS-MBUS-A / IBOX-MBS-MBUS-B



Gateway for the monitoring of M-Bus meters from Modbus (RTU or TCP) master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- IBOX-MBS-MBUS-A and IBOX-MBS-MBUS-B have been designed to monitor M-Bus meters (EN 13757-3) from any Modbus master or client device (SCADA, BMS, PLC...).
- It connects to the M-Bus system through an external RS232 or RS485 to M-Bus level converter in one side, and in the other side it communicates to the monitoring/control system with Modbus RTU or TCP protocol.
- Allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.
- IBOX-MBS-MBUS-A allows monitoring of up to 60 M-Bus meters and a maximum of 600 internal data points, and IBOX-MBS-MBUS-B allows monitoring of up to 500 M-Bus meters and a maximum of 2000 internal data points.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxMB with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*





### IntesisBox® Modbus Server - Notifier ID3000 series

Ref. IBOX-MBS-NID3000



Gateway for monitor and control Notifier ID3000 / ID3002 / ID60 / ID50 fire panels from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of Notifier fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IntesisBox allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. *IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.*
- IntesisBox connects to the RS232 port of the Notifier panel, either through the RS232 port of the mother board, or through the isolated ISO-RS232 port (optional card).
- Monitoring of the Notifier elements (detectors, outputs...) through independent Modbus registers. The value in the Modbus register indicating the state of the panel's element is fully configurable. Commands toward the panel are also supported (reset, silence, test elements...).
- Fixed Modbus address map, the register number identifies the element into the Notifier panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). One full panel capacity is supported.
- IntesisBox Modbus Server series are configured using LinkBoxMB, a software tool for windows<sup>™</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





## IntesisBox<sup>®</sup> Modbus Server - Honeywell XLS 80

Ref. IBOX-MBS-XLS80



Gateway for monitor and control Honeywell XLS 80 fire panels from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of Notifier fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IntesisBox allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.
- IntesisBox connects to the RS232 port of the Honeywell panel, either through the RS232 port of the mother board, or through the isolated ISO-RS232 port (optional card).
- Monitoring of the Honeywell elements (detectors, outputs...) through independent Modbus registers. The value in the Modbus register indicating the state of the panel's element is fully configurable. Commands toward the panel are also supported (reset, silence, test elements...).
- Fixed Modbus address map, the register number identifies the element into the Honeywell panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). One full panel capacity is supported.
- IntesisBox Modbus Server series are configured using LinkBoxMB, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





### IntesisBox® Modbus Server - ESSER 8007/8008

Ref. IBOX-MBS-ESSER



Gateway for monitor and control ESSER 8007 / 8008 fire panels from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of ESSER fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IntesisBox allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. *IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.*
- ESSER IDT protocol, either over RS485 or RS232 serial line is supported.
- Monitoring of the ESSER elements (detectors, outputs, zones) through independent Modbus registers. The Modbus address map is fully configurable. The states desired to be translated to Modbus are also selectable (0-Normal, 1-Alarm...7-Test).
- Integration of up to 3000 points is supported by IntesisBox. Commands toward the panel are also supported (reset, disconnect and test of elements...).
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





# IntesisBox<sup>®</sup> Modbus Server - Siemens Cerberus (CC11, CC10) ISO 1745 protocol

#### Ref. IBOX-MBS-CERBERUS



Gateway for monitor and control Siemens AlgoRex / Cerberus fire detection systems (CS11, CS10...) from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of CERBERUS fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IBOX-MBS-CERBERUS has been designed to monitor and control Siemens Cerberus fire detection systems (equipped with BMS interface providing ISO 1745 protocol through serial port RS232), from a Modbus master or client device. Several panels connected in network can be integrated using just one IntesisBox, up to 5000 points in total.
- IntesisBox connects directly to the serial port RS232 of the Cerberus interface providing ISO 1745 protocol in one side, and in the other side to the Modbus network, via TCP (Ethernet) or RTU (RS232 or RS485) configurable by software.
- Immediate availability of the states of Cerberus elements in IntesisBox (event driven protocol). IntesisBox has a fully configurable table associating Cerberus elements with Modbus register addresses, also the value desired in Modbus to indicate any possible state (alarm, fault...) is fully configurable.
- Commands toward Cerberus are allowed (Reset, Test, AckAlarm...), the value to use in Modbus for each command is configurable. Date & time synchronization of Cerberus can be done by writing in specific Modbus registers enabled for this.
- IntesisBox Modbus Server series are configured using LinkBoxMB, a software tool for windows™ which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.

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### IntesisBox® Modbus Server - Siemens FC330A

#### Ref. IBOX-MBS-FC330A



Gateway for monitor and control Siemens FC330A fire detection systems from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of CERBERUS fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IBOX-MBS-FC330A has been designed to monitor Siemens FC330A fire panels from a Modbus master or client device.
- IntesisBox connects directly to the serial port RS232 of the FC330A panel in one side, and to the Modbus network in the other side, via TCP (Ethernet) or RTU (RS232 or RS485) configurable by software.
- States of Zones, Control Zones and Inputs are monitored through independent Modbus registers, each possible state is indicated by a predefined value in Modbus (0-Normal, 1-Disconnected, 2-Local Alarm UnAck...). Commands toward the FC330A panel are also allowed (Ack, Reset...).
- Fixed Modbus address map, the register number identifies the element (zone, input...) into the FC330A panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). One full panel capacity is supported.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





### IntesisBox® Modbus Server - KILSEN KSA 7xx series

#### **Ref. IBOX-MBS-KILSEN**



## Gateway for monitor KILSEN fire detection systems from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor your network of KILSEN KSA 7xx series fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IBOX-MBS-KILSEN has been designed to monitor KILSEN fire panels from a Modbus master or client device.
- IntesisBox connects directly to the serial port RS232 of the KILSEN panel in one side, and to the Modbus network in the other side, via TCP (Ethernet) or RTU (RS232 or RS485) configurable by software.
- States of Zones, and Elements are monitored through independent Modbus registers, each
  possible state is indicated by a predefined value in Modbus (0-Normal, 1-Alarm, 2-PreAlarm,
  3-Fault, 4-Disconnected).
- Fixed Modbus address map, the register number identifies the element or zone into the panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). One full panel capacity is supported.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.







## IntesisBox® Modbus Server - ZITON ZP3 (ZCP2-2 protocol)

**Ref. IBOX-MBS-ZITON** 



## Gateway for monitor ZITON ZP3 fire panels from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor your network of ZITON fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IBOX-MBS-ZITON has been designed to monitor ZITON fire panels from a Modbus master or client device.
- IntesisBox connects directly to the serial port RS232 of the ZITON panel in one side, and to the Modbus network in the other side, via TCP (Ethernet) or RTU (RS232 or RS485) configurable by software.
- States of Elements are monitored through independent Modbus registers, each possible state (Normal, Fire Alarm, PreAlarm...) can be indicated in Modbus by the desired value, freely configurable.
- Fixed Modbus address map, the register number identifies the element into the panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). Elements can also be grouped allowing to monitor several elements through a single Modbus register (a kind virtual zones). One full panel capacity is supported.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





## IntesisBox® Modbus Server - ADEMCO Algorinet (BC216-x)

Ref. IBOX-MBS-ALGORI



Gateway for monitor ADEMCO Algorinet (BC216-x) fire detection systems from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of ADEMCO Algorinet fire panels remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IntesisBox connects directly to the serial port RS232 of the Algorinet panel and allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.
- Fully configurable Modbus address map, the register address for each element into the panel can be freely assigned, offering a very powerful and flexible configuration. Integration of up to 5000 points is supported.
- Monitoring of the Algorinet elements (detectors, outputs...) through independent Modbus registers. The value in the Modbus register indicating the state of the panel's element is fully configurable. Commands toward the panel are also supported (reset, silence, test elements...) and the values to use from Modbus for each command are also fully configurable.
- IntesisBox Modbus Server series are configured using *LinkBoxMB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of *LinkBoxMB* allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.





## IntesisBox® Modbus Server - ADEMCO Galaxy (SIA Protocol)

Ref. IBOX-MBS-GALAXY



Gateway for monitor and control ADEMCO Galaxy (SIA protocol) security systems from Modbus master or client devices (SCADA, BMS, PLC, HMI, TouchPanels...)

- Monitor & Control your network of ADEMCO Galaxy security systems remotely from your Control Center using any commercial SCADA or monitoring software with Modbus TCP driver.
- IntesisBox connects directly to the serial port RS232 of the Galaxy panel and allows Modbus TCP (Ethernet) or Modbus RTU (RS232 or RS485) communication, configurable by software. IntesisBox is a server device in case of Modbus TCP communication, or a slave device in case of Modbus RTU communication.
- Fixed Modbus address map, the register number identifies the element into the panel. Simple configuration, no point's configuration needs to be entered, just the communication parameters (IP address, baud rate...). One full panel capacity is supported.
- Monitoring of the Galaxy elements (groups, zones, outputs...) through independent Modbus registers. The zones in use (from 1 to 512) can be selected. Commands toward the panel are also supported (reset, force set, omit zone...).
- IntesisBox Modbus Server series are configured using LinkBoxMB, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. The user interface of LinkBoxMB allows simulating the values of the Modbus registers without the need to be physically connected to the panel, very useful while in commissioning phase.

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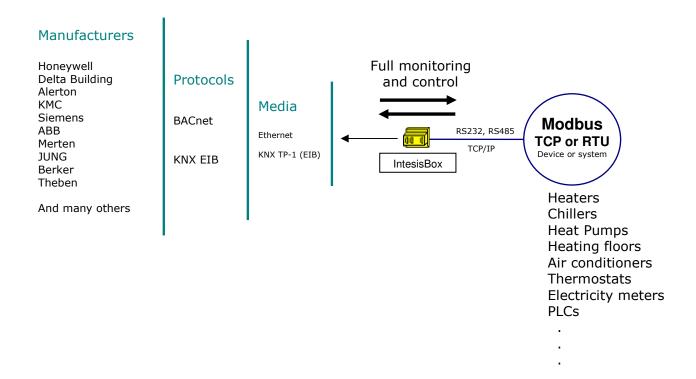




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Modbus master (client) gateways designed for integration of Modbus devices or systems into other control systems (BACnet, KNX....)







## IntesisBox® KNX - Modbus RTU master

#### Ref. IBOX-KNX-MBRTU-A / IBOX-KNX-MBRTU-B



Gateway for integration of Modbus RTU slave devices (thermostats, electricity meters, chillers, heating floors, PLCs...) into KNX EIB installations.

- IBOX-KNX-MBRTU-A and IBOX-KNX-MBRTU-B have been designed to offer full monitoring/control of Modbus slave devices or systems from KNX EIB installations.
- Specially suited for integration of thermostats, electricity meters, chillers, heating floors, PLCs... into KNX EIB.
- Connects directly to the EIB bus in one side, and in the other side it communicates to the system to integrate via Modbus RTU.
- Supports Modbus RTU protocol over RS232 or RS485.
- Bi-directional monitoring and control, register addresses, functions and data types fully configurable in the Modbus interface.
- IBOX-KNX-MBRTU-A supports up to 500 points, and IBOX-KNX-MBRTU-B supports up to 3000.
- IntesisBox KNX series are configured using *LinkBoxEIB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxEIB with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*





## IntesisBox® KNX - Modbus TCP master

Ref. IBOX-KNX-MBTCP-A / IBOX-KNX-MBTCP-B



Gateway for integration of Modbus TCP slave devices (thermostats, electricity meters, chillers, heating floors, heat pumps, PLCs...) into KNX EIB installations.

- IBOX-KNX-MBTCP-A and IBOX-KNX-MBTCP-B have been designed to offer full monitoring/control of Modbus slave devices or systems from KNX EIB installations.
- Specially suited for integration of thermostats, electricity meters, chillers, heating floors, heat pumps, PLCs... into KNX EIB.
- Connects directly to the EIB bus in one side, and in the other side it communicates to the system to integrate via Modbus TCP.
- Supports Modbus protocol over TCP/IP.
- Bi-directional monitoring and control, register addresses, functions and data types fully configurable in the Modbus interface.
- IBOX-KNX-MBTCP-A supports up to 500 points, and IBOX-KNX-MBTCP-B supports up to 3000 points.
- IntesisBox KNX series are configured using *LinkBoxEIB*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxEIB with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*







## IntesisBox® BACnet/IP server - Modbus RTU master

Ref. IBOX-BAC-MBRTU-A / IBOX-BAC-MBRTU-B



Gateway for integration of Modbus RTU slave devices (thermostats, electricity meters, chillers, heating floors, PLCs...) into BACnet/IP control systems.

- IBOX-BAC-MBRTU-A and IBOX-BAC-MBRTU-B have been designed to offer full monitoring/control of Modbus slave devices or systems from BACnet/IP networks.
- Specially suited for integration of thermostats, electricity meters, chillers, heating floors, PLCs... into BACnet/IP control systems (BMS, SCADA, PLCs...).
- Connects directly to the BACnet/IP network in one side, and in the other side it communicates to the system or device to integrate via Modbus RTU. Supports Modbus RTU protocol over RS232 or RS485, software configurable. IntesisBox is a Modbus RTU master device.
- Bi-directional monitoring and control of Modbus slave devices. Register addresses, functions and data types fully configurable in the Modbus interface. COV and Polling supported in the BACnet/IP interface. Modbus devices' points available in BACnet through *present\_value* property of AI, AO, AV, DI, DO, DV, MI, MO, MV objects.
- IBOX-BAC-MBRTU-A supports up to 500 points, IBOX-KNX-MBRTU-B supports up to 3000 points, and both allow integration of up to 254 Modbus RTU slave devices.
- IntesisBox BACnet/IP Server series are configured using *LinkBoxBacnet*, a software tool for windows<sup>TM</sup> which is supplied along with the purchase of IntesisBox with no additional cost. *Demo configuration files are also supplied for LinkBoxBacnet with no additional cost, making the configuration of IntesisBox for this integration extremely easy and quick, almost plug & play.*





### Официальный дистрибьютор





INTESIS SOFTWARE provides innovative solutions for home and building automation in more than 40 countries around the world

